

Exploring faculty adaptation to course content creation post-COVID-19: Perceptions, challenges,
and best practices for higher education

by

Lisa Shappee

B.S., University of Kansas, 2000
M.L.S., Emporia State University, 2007
M.S., Emporia State University, 2008

AN ABSTRACT OF DISSERTATION

submitted in partial fulfillment of the requirements for the degree

DOCTOR OF PHILOSOPHY

Department of Curriculum and Instruction
College of Education

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Manhattan, Kansas

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Abstract

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The study utilized a qualitative case study approach, drawing on three theoretical frameworks, Self-Determination Theory (SDT), the Technology Acceptance Model (TAM), and self-efficacy theory. These frameworks helped to examine faculty motivations, technological adoption, and pedagogical effectiveness. Data collection involved semi-structured interviews with faculty and syllabi analysis. These methods provide both a detailed account of the instructional changes implemented and insight into the faculty experience of navigating these changes.

This study offers recommendations that extend beyond short-term faculty training to emphasize the institutional conditions that sustain effective online and hybrid teaching. Findings highlight the importance of structured course design, intentional technology integration, clear communication, balanced workload expectations, and ongoing instructional support. The study also contributes to theoretical understanding by demonstrating how faculty motivation, autonomy, and self-efficacy evolved alongside technology adoption. Overall, the findings

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Approved by:
Major Professor
Dr. Deepak Subramony

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Table of Contents

List of Figures	xiv
Acknowledgements	xv
Chapter 1 - Introduction	1
Purpose of the study	1
The Evolution and Impact of Online Learning in Higher Education	2
Problem Statement	6
Theoretical framework	6
Technology Acceptance Model	8
Self-efficacy	9
Research Questions	10
Methodology	11
Significance of the Study	11
Delimitations of the Study	11
Limitations of the Study	12
Definition of Terms	13
Summary	14
Chapter 2 - Review of Literature	15
Impact of Covid-19 on Higher Education	15
Emergency Remote Teaching	16
Positive Impacts and Future Directions	17
Technology Acceptance Model	19
Core Components of TAM	19
TAM Application in Educational Research	20
Self-Determination Theory	20
Theoretical Foundations of SDT	21
Application to Faculty Development and Online Learning	22
Self-efficacy	22
Theoretical Background	23
Influence on Utilizing Technology and Professional Development	24

Faculty Professional Development	25
The Integration of TAM, Self-Efficacy, and SDT in Educational Research Technology	26
Integration of TAM and SDT.....	26
Self-Efficacy and TAM.....	27
Summary	28
Chapter 3 - Methodology	29
Introduction.....	29
Research Design	30
Case Study Approach	31
Case Study Description.....	31
Research Questions	32
Participant Selection	33
Purposeful Sampling	34
Snowball Sampling	35
Criteria for Inclusion	35
Recruitment Plan.....	36
Data Collection	36
Semi-Structured Interviews	37
Preparation for Interviews.....	37
Post-Interview Process.....	39
Syllabi Analysis	40
Data Analysis	41
Coding and Thematic Analysis Plan	41
Coding Process	42
Thematic Analysis	42
Method for Analyzing Syllabi	44
Thematic Analysis of Syllabi.....	45
Ensuring Trustworthiness and Credibility	46
Delimitations and Limitations	47
Delimitations	47
Limitations	48

Summary	49
Chapter 4 - Data Analysis and Findings	51
Introduction.....	51
Participant Overview	52
Study Overview	54
Role of Syllabi	57
Overview of Findings	58
Theme 1: Adaptation.....	59
Faculty Perspectives: Intentional Redesign and Improved Course Organization	61
Faculty Perspectives: Shift Toward Flexibility and Responsiveness	62
Faculty Perspectives: Sustained Pedagogical Changes After the Return to Campus	65
Administrator Perspectives: Institutional Conditions Shaping Early Adaptation.....	66
Administrator Perspectives: Establishing Early Instructional Expectations.....	67
Theme 2: Growth in Technology Use, Confidence, and Teaching Self-Efficacy	73
Faculty Perspectives: Increased Familiarity and Comfort with Technology.	74
Faculty Perceptions: Growing Perceptions of Technology’s Usefulness	75
Faculty Perspectives: Developing Teaching Self-Efficacy Through Practice and Support	76
Faculty Perspectives: Sustained Integration of Technology into Teaching	78
Administrator Perspectives: Technology Adoption as Forced Master	79
Administrator Perspectives: Observations on Self-Efficacy.....	80
Syllabi Analysis	81
Theme 3: Workload, Time, and Structural Barriers to Online Course Redesign	82
Faculty Perspectives: Heaving Workload and Time Constraints	83
Faculty Perspectives: Lack of Clear or Consistent Institutional Direction	84
Faculty Perspectives: Unequal Access to Technology and Resources	87
Faculty Perspectives: Emotional and Cognitive Overload	88
Administrator Perspectives: Structural and Policy Constraints	89
Administrator Perspectives: Technology and Access Assumptions	90
Theme 4: Facilitators Supporting Effective Teaching Practices.....	92
Faculty Perspectives: Instructional Designers as Essential Support.....	93

Faculty Perspectives: Peer Collaboration and Informal Professional Communities	95
Faculty Perspectives: Timely and Practical Professional Development	96
Faculty Perspectives: Autonomy, Creativity, and Flexibility in Course Design	97
Administrator Perspectives: Support as Relationship-Based, Not Just Structural	98
Administrator Perspectives: Instructional Designers and Academic Support Units Mediating Policy and Practice	99
Theme 5: Long-Term Pedagogical Shifts and Future Directions in Higher Education	101
Faculty Perspectives: Increased Emphasis on Empathy and Human-Centered Teaching	103
Faculty Perspectives: Greater Expectations for Institutional Support and Training	103
Faculty Perspectives: Reevaluation of Assessment and Engagement Practices	104
Administrator Perspective: Cultural and Attitudinal Shifts	105
Administrator Perspectives: Preparedness for Future Disruptions	106
Summary	108
Chapter 5 - Discussions and Implications	110
Introduction	110
Interpretation of Findings by Theme	111
Theme 1: Adaptation	111
Connections to Theoretical Frameworks	112
Connections to Existing Literature	114
Connection to the Research Question	116
Theme 2: Growth in Technology Use, Confidence, and Teaching Self-Efficacy	117
Connections to Theoretical Frameworks	118
Connection to Existing Literature	120
Connection to the Research Question	121
Theme 3: Workload, Time, and Structural Barriers to Online Course Redesign.	122
Connections to Theoretical Frameworks	123
Connection to Existing Literature	124
Connection to the Research Question	125
Theme 4: Facilitators Supporting Effective Teaching Practices	126
Connections to Theoretical Frameworks	127

Connections to Literature.....	129
Connection to the Research Question	130
Theme 5: Long-Term Pedagogical Shifts and Future Directions in Higher Education	131
Connections to Theoretical Frameworks	132
Connections to Literature.....	133
Connection to the Research Question	135
Implications for Faculty	136
Continued Use of Structured, Modular Course Design	136
Ongoing Integration of Digital Tools to Enhance Learning	137
Emphasis on Empathy and Flexibility	138
Implications for Administrators.....	139
Balance Expectations with Adequate Support	139
Provide Clear, Consistent Communication	139
Invest in Sustainable Technology Infrastructure	141
Implications for Instructional Designers and Support Units	142
Expand Access to On-Demand, Practical Training	142
Maintain Collaborative Design Partnerships	143
Create Shared Resource Libraries	143
Implications for Institutions.....	144
Develop Long-Term Strategies for Online and Hybrid Instruction	144
Promote a Culture of Innovation and Collegial Support.....	145
Prioritize Accessibility and Inclusive Design.	146
Recommendations for Future Research	147
Summary	149
References.....	152
Appendix A - Participation Request Correspondence	161
Appendix B - Structured Interview Questions.....	166
Appendix C - Syllabus Analysis Tool	169
Appendix D - Debriefing Statement	171
Appendix E - Consent Form	173
Appendix F - IRB Approval	175

Appendix G - Codebook	177
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List of Figures

Figure 1.1	<i>National Center for Education Statistics data for distance education</i>	3
Figure 1.2	<i>Self-Determination Theory Framework</i>	7
Figure 4.1	<i>Participant Demographic Characteristics</i>	52
Figure 4.2	<i>Administrator Demographic Characteristics</i>	53
Figure 4.3	<i>Comparison of Pre- and Post-Pandemic Syllabi Characteristics</i>	58
Figure 4.4	<i>Study Themes and Subthemes</i>	59
Figure 5.1	<i>Connections Between Themes and Theoretical Frameworks</i>	111
Figure 5.2	<i>Summary of Implications for Practice</i>	136

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Chapter 1 - Introduction

Purpose of the study

The purpose of this study is to examine faculty perspectives on instructional change in the years following the COVID-19 pandemic. The study focuses on how teaching practices and technology use evolved after the initial transition to emergency remote teaching (ERT), specifically examining instructional practices implemented in Spring 2021 and beyond. Rather than concentrating solely on immediate responses to disruption, this research explored how faculty reflected on their experiences and integrated new approaches into their ongoing teaching. It examined how pandemic adaptations became embedded within online, hybrid, and face-to-face instruction over time. By understanding how faculty described these changes, the study seeks to explain how instructional practices developed after ERT.

The study also seeks to understand how the pandemic influenced faculty motivation, engagement, and perceptions of competence in teaching across modalities. It examines how faculty perceptions of technology usefulness, autonomy, and self-efficacy shaped their instructional decisions in post-pandemic circumstances. In addition, the research explores the role institutional support, communication, and professional development played in sustaining or constraining instructional change. Interviews with faculty provided insight into whether instructional changes represented temporary adjustments or lasting shifts in practice. Through this lens, the study moves beyond identifying best practices to examine how instructional change unfolded within a specific institutional environment.

The findings are relevant to university administrators, instructional designers, and faculty involved in online and hybrid course development. These insights offer guidance for supporting sustained instructional quality across modalities and for understanding how instructional change

can be supported over time, rather than focusing solely on short-term solutions. The study also addresses broader implications for institutional planning, faculty support structures, and technology integration.

The Evolution and Impact of Online Learning in Higher Education

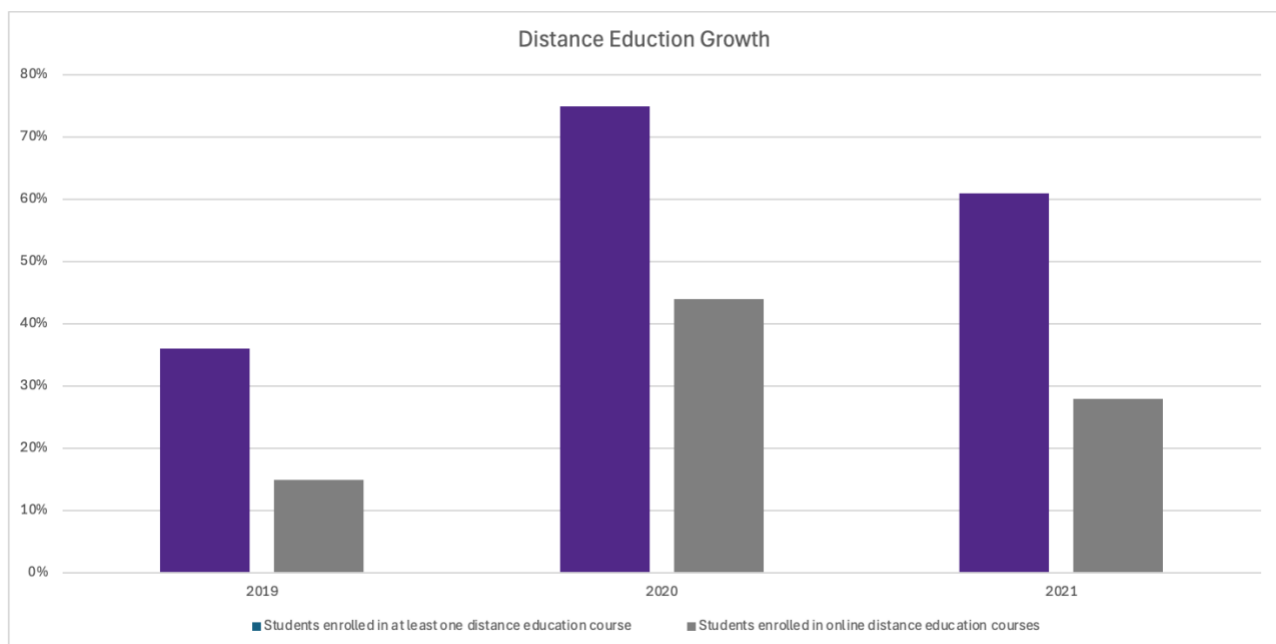
Defining online learning involves many elements and considerations, and despite research into the matter, there remains no consensus. Singh and Alexander (2019) propose several definitions to explain online learning while incorporating essential elements. One approach defines online learning as a synchronous experience, where students engage with instructors and peers in real-time via the Internet without being restricted to a specific physical location. Alternatively, online learning can occur asynchronously, allowing students to interact with course materials, instructors, and classmates at their convenience without simultaneous participation or physical presence. Online education, in general, is defined as the delivery of educational content through the Internet, with instructors developing content that contributes to learning and interaction in synchronous and asynchronous environments contribute to learning and interaction in synchronous and asynchronous environments. This last definition offers a flexibility that includes all critical aspects of online learning, allowing adaptation to different educational environments.

Similarly, Moore et al. (2011) emphasize that online learning is primarily accessed through digital platforms or the Internet. It can occur in real-time or at the learner's convenience, with the core element removing the need for physical presence, enabling students to participate from any location. Together, these perspectives highlight the adaptable nature of online learning, making it accessible and flexible for a wide range of learners.

The first instance of online learning dates back to the 1960s when the University of Illinois allowed students to learn from interconnected computer terminals. It was not until 1984 that the University of Toronto offered the first fully online course (Sarkar, 2020). Since then, online education has flourished. In 2019, 36% of undergraduates enrolled in at least one distance education course, which increased to 61% by 2021. Additionally, the percentage of students taking exclusively online courses rose from 15% in 2019 to 20% in 2021 (NCES, 2023). The pandemic in 2020 significantly impacted distance education. This information is illustrated in Figure 1.1, showing the rise in online education participation over time.

Figure 1.1

National Center for Education Statistics data for distance education



Note. Chart created by author to illustrate data from NCES.

The widespread adoption of online learning in higher education has greatly expanded access to academic programs but has also spurred changes in teaching methodologies. Unlike traditional in-person instruction, online teaching requires distinct approaches suited to the digital

format. Studies have shown that the effectiveness of online instruction heavily relies on creating engaging, interactive content and incorporating the right technologies to support student learning (Wolf, 2006). One key aspect of successful online education is faculty preparation, which includes professional development and allowing ample time to create the course before it goes live. Faculty members who undergo formal training in online pedagogy tend to exhibit stronger teaching performance in online settings, which correlates with higher levels of student success in online courses (Wolf, 2006).

As the distance education landscape evolves, higher education institutions are increasingly focused on ensuring that the flexibility and accessibility of online learning do not compromise academic rigor. This challenge has led to a growing body of research exploring best practices for online and hybrid course delivery. Researchers have pointed to the need for active learning strategies and faculty-student interaction as critical components of high-quality online education (Singh & Alexander, 2019). As institutions continue to navigate the transition to more online and hybrid models, research has begun to uncover the pedagogical approaches and support structures necessary to help both students and faculty succeed in this evolving educational environment. Faculty development programs that focus on building teaching skills and fostering innovation in course design have become essential in enabling educators to meet the demands of online teaching, ensuring that the quality of education remains consistent across all formats (Hodges et al., 2020). Many universities invested in software and multimedia support programs for online teaching, along with professional development staff such as instructional designers (ID) who support curriculum design and instructional technologists who provide training in educational technologies used to create course content.

The pandemic, which reached the United States in early 2020, disrupted the traditional education system. As nations struggled with the need for strict health measures, higher education institutions were forced to reevaluate and adapt their traditional teaching methods quickly. In response to the crisis, universities worldwide transitioned to remote teaching practices, or ERT, a paradigm shift that necessitated the incorporation of various online technologies to ensure academic continuity (Hodges et al., 2020).

The forced shift to emergency response teaching (ERT) left faculty who had never taught online or had limited experience with educational technologies with only days or up to two weeks to learn how to use these tools to continue their courses effectively. This emergency response also left universities scrambling for ways to offer support and training to these faculty who were desperately seeking knowledge in this area. Most of this work fell on IDs, if the universities had them. Many universities that had not invested in instructional design staff and training programs were left reeling to find a solution.

The pandemic compelled instructors to learn and teach online, acquiring valuable skills that can enhance the flexibility and reach of higher education. Universities observed that faculty, who previously showed little interest in professional development, were eager to participate in training sessions to navigate the Spring 2020 semester successfully. Faculty were pleased to see that administration, which had previously been reluctant, was now willing to invest in support staff to facilitate this transition. Instructional developers played a crucial role in ensuring that faculty and courses were prepared for students, sometimes within just a week (Decherney & Levander, 2020). It is essential to build on this newfound knowledge and the investments in faculty professional development to advance higher education in the post-pandemic era.

Problem Statement

The impact of the pandemic on higher education calls for research into how university faculty members have navigated rapid instructional changes, particularly how teaching practices evolved following the initial transition to ERT. This case study explores faculty perceptions at a large midwestern public research university regarding changes in their course content delivery methods since the onset of the pandemic in the spring of 2020. My analysis of faculty experiences offers practical insights valuable to administrators, faculty, and instructional designers at similar institutions facing comparable challenges.

The findings from this case study hold relevance for other public research universities with similar characteristics, including large enrollment, diverse academic programs, and faculty responsibilities that balance teaching, research, and service. The findings highlight the institutional conditions, support structures, and instructional strategies that influence whether change becomes lasting or temporary, rather than identifying isolated best practices. The study also provides insight into how faculty motivation, engagement, and perceptions of competence evolved alongside technology use. These findings can assist institutional leaders, instructional designers, and faculty in developing support systems that foster long-term instructional growth across higher education settings.

Theoretical framework

This case study is underpinned by a theoretical framework comprised of three interrelated concepts that contribute to understanding faculty engagement with online teaching methods. Self-Determination Theory (SDT) provided a framework for understanding faculty motivation and engagement with online teaching methods. The Technology Acceptance Model (TAM) was employed to evaluate the perceived utility and ease of use of online course content delivery

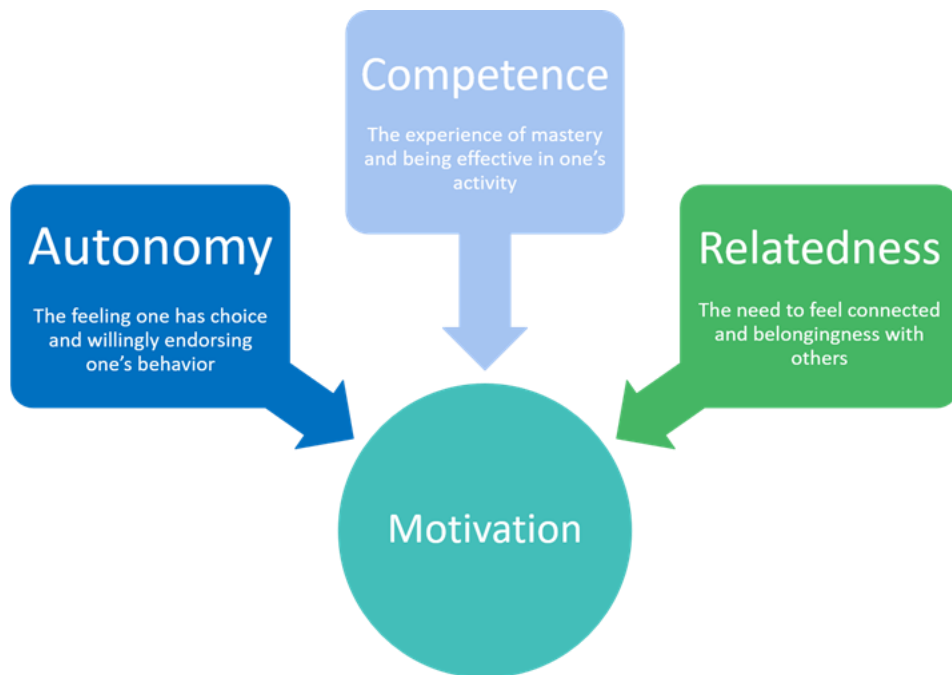
technologies, highlighting the factors that influenced faculty acceptance and adoption of these tools. Furthermore, integrating the lens of self-efficacy provided insight into faculty members' perceived capabilities and adaptability in embracing technological advancements and offered a lens through which potential barriers to integrating technology-enhanced teaching practices could be identified and addressed. This theoretical framework, which included SDT, TAM, and self-efficacy, provides a foundation for understanding faculty engagement with online teaching methods.

Self-Determination Theory Self-Determination Theory (SDT) served as one of the key theoretical frameworks in this study for examining faculty members' motivation and engagement with technology learning tools. Developed by Deci and Ryan (1985), SDT provides a comprehensive perspective on human motivation, focusing on the fulfillment of three fundamental psychological needs: autonomy, competence, and relatedness. Autonomy refers to an individual's ability to feel self-directed and in control of their actions, competence involves feeling capable and effective in performing tasks, and relatedness reflects the sense of connection and belonging with others. When these needs are met, individuals experience enhanced well-being and are more likely to engage in positive behaviors. Conversely, when these needs are unmet, individuals may feel isolated, disengaged, and unmotivated. In the context of this study, SDT was crucial for explaining how these psychological needs influence faculty members' motivation to adopt and engage with technology in their teaching practices.

A visualization of SDT is presented in Figure 1.2.

Figure 1.2

Self-Determination Theory Framework



Note. Adapted from the Center for Community Health & Prevention, University of Rochester Medical Center (n.d.)

SDT is a framework for developing practices and policies that foster motivation, performance, and well-being. The hypothesis in studies that utilize this theory relates to higher education faculty and states that if all three components are fulfilled, they are more likely to engage in effective teaching practices, leading to higher student learning in the classroom.

Technology Acceptance Model

The TAM is widely used to understand how individuals adopt technology, especially in higher education. Developed by Davis in 1989, TAM explores how people's attitudes toward technology shape their intentions and behaviors when using it (Alfadda & Mahdi, 2021). Two key factors, perceived usefulness (PU) and perceived ease of use (PEU), influence these attitudes. PU is about how much someone believes the technology will improve their

performance, while PEU focuses on how easy the technology is to use. These perceptions play a major role in whether people accept and incorporate technology into their work or studies.

In addition to PU and PEU, TAM highlights how these factors shape an individual's overall attitude toward the technology, which then drives their intention to use it and, ultimately, their actual use (Sherer et al., 2019). When people see technology as helpful and easy to use, they are more likely to embrace it. In higher education, TAM is beneficial for understanding how faculty and students adopt new tools like online teaching platforms. This model emphasizes the importance of making technology functional and user-friendly to ensure successful integration (Rosli & Saleh, 2022).

Self-efficacy

Self-efficacy refers to an individual's belief in their ability to successfully complete a task or achieve a goal in a specific situation. According to Waddington (2023), self-efficacy beliefs are shaped by four key sources: mastery experiences (previous successes), vicarious experiences (observing others succeed), verbal persuasion (encouragement from others), and physiological and emotional states (how one feels about the task at hand). These elements contribute to how confident a person feels in their ability to perform and succeed.

Self-efficacy is critical in influencing motivation, behavior, and performance in education. Individuals with high self-efficacy are more likely to engage in tasks, persist in the face of difficulties, and bounce back from setbacks, as they believe in their ability to achieve their goals. According to Bandura (1997), self-efficacy affects how people think, feel, and behave and determines how much effort they put into a task and how long they will persist when obstacles arise. Mastery experiences, the most influential source of self-efficacy, help individuals build confidence as they succeed in similar tasks over time (Schunk, 1991). Observing others

completing tasks (vicarious experiences) can also boost one's confidence, particularly when the observer identifies with the person being watched (Usher & Pajares, 2008). Verbal persuasion, or positive feedback and encouragement from others, further strengthens self-efficacy by convincing individuals that they possess the skills needed to succeed (Gist & Mitchell, 1992). Lastly, the emotional and physiological state of the individual, such as feeling calm and confident or anxious and doubtful, can significantly impact their level of self-efficacy (Zimmerman, 2000). These factors shape how people approach challenges, influencing their overall success in various domains of life.

Research Questions

Five research questions were developed to guide the study, exploring various dimensions of faculty members' experiences:

1. How have faculty adapted their teaching methods in response to the transition to online teaching spurred by the COVID-19 pandemic?
2. What teaching practices and technologies have faculty members adopted since the pandemic, and how do they perceive the effectiveness of these practices in enhancing online and hybrid course delivery?
3. What barriers have faculty identified in the transition to and implementation of creating online course content?
4. What facilitators have faculty identified in the transition to and implementation of creating online course content?
5. What aspects of professional development programs are most effective in supporting faculty members' transition to and enhancement of online and hybrid teaching?

Methodology

This study employs a single case study approach, focusing on a large midwestern public research university. This approach allowed for a deep dive into the experiences and perspectives of faculty within this specific setting. Data was gathered through semi-structured interviews conducted via video conferencing, giving faculty and administrator participants the flexibility to share their insights on how they adapted to ERT and how these changes affected their teaching practices or administration approaches. Along with these interviews, syllabi were analyzed to see what changes were made during and after the pandemic and how course policies and procedures shifted. By focusing on one university, the study gains comprehensive insights into faculty's unique challenges and adaptations, offering valuable implications for similar universities.

Significance of the Study

This case study contributes to research on post-pandemic instructional change by examining how faculty teaching practices evolved after the emergency remote teaching (ERT) period and which adaptations persisted as teaching stabilized. By interpreting faculty experiences through self-efficacy, SDT, and the TAM, the study provides insight into how institutional context, faculty motivation, and support structures influence the sustainability of instructional change across teaching modalities.

Delimitations of the Study

This study focuses on faculty at a large midwestern public research university. By concentrating on this specific group, the research intended to provide an in-depth understanding of faculty experiences and adaptations to ERT within this particular context. This focus allowed for a thorough exploration of instructional change within a public research university located outside of a major metropolitan area, where faculty served a diverse student population that

included many rural and first-generation students and where levels of prior online teaching experience varied among faculty. These contextual characteristics may influence how findings transfer to other institutional settings.

Additionally, while the study initially employed purposeful sampling to capture a diverse range of faculty perspectives, it was designed with the flexibility to use convenience sampling. This approach ensured that the study could gather insights from those willing and available to participate while aiming to represent the broader faculty population as accurately as possible. These delimitations were established to maintain a manageable and focused study scope, providing a detailed examination of the issues within a clearly defined boundary.

Limitations of the Study

One limitation of this study was the potential for researcher bias. Having trained faculty on online teaching since the summer of 2012, the researcher brought relevant experience to the study but may also have carried preconceived notions that could have influenced the interpretation of findings. Another limitation was the study's focus on faculty perspectives, which meant it did not incorporate views from students, who were also stakeholders in the instructional transition. While this focus was intentional, it inevitably narrowed the scope and excluded a broader understanding of the university's response to ERT. Additionally, the study's timeframe, spanning from the initial shutdown of educational institutions in March 2020 through the time of data collection, may not have fully captured the long-term effects of this significant disruption. Five years offered an initial understanding, but the complete impact of these changes may only become apparent over a longer period.

Definition of Terms

Course Content. All informational resources necessary for participation and comprehension, including assigned readings, video recordings, exams, and other learning materials. (UC Berkeley, 2024).

Educational Technology. The term refers to tools, technologies, and resources that can be utilized to enhance learning experiences, according to Huang, Spector, and Yang (2019). It consists of both software and hardware, such as AR and VR environments and simulations, LMS, and PCs, tablets, and cameras. For this study, educational technology will focus on tools, platforms, and online learning materials.

Emergency Remote Teaching. Emergency remote teaching (ERT) describes a temporary transition from traditional teaching methods to distance or online education due to an urgent and crisis situation (Hodges et al., 2020).

Face-to-face Course. A course that is taught entirely in person. Faculty may use online educational technologies to teach content, but the class meets on a regular semester schedule.

Faculty. Individuals teaching at a university or college.

Hybrid Course. Hybrid courses are those that alternate between online meetings and regularly scheduled in-person classroom sessions (Arispe & Blake, 2012). The percentage of time in-person or online is variable depending on the course and institution.

Online Course. An online course is a way of teaching and learning over the internet, letting students take classes and earn credits or degrees from anywhere. It doesn't require being on campus and can include things like live video sessions, interactive websites, or self-paced activities (Asad, 2023).

Summary

The onset of the COVID-19 pandemic in early 2020 marked a significant disruption in the traditional education system, compelling higher education institutions worldwide to transition rapidly to ERT. This abrupt shift challenged faculty members with limited experience with online teaching and educational technologies. It spurred an unprecedented demand for staff and training to support these educators in adapting to new teaching methodologies. The study investigates the experiences and perceptions of faculty members and administrators at a large midwestern public research university regarding their adaptation to online course content delivery since the pandemic's outbreak. Utilizing a case study approach underpinned by SDT, the TAM, and self-efficacy, the research sought to understand faculty engagement, motivation, and the effectiveness of various teaching methods and technologies.

The following chapter reviews literature on the impact of the COVID-19 pandemic and emergency remote teaching (ERT) on higher education and faculty teaching practices. It also examines faculty adaptation to online and hybrid instruction, the role of professional development in supporting instructional change, and the theoretical frameworks of Self-Determination Theory (SDT), the Technology Acceptance Model (TAM), and self-efficacy that guide this study.

Chapter 2 - Review of Literature

The pandemic brought a significant shift to higher education, prompting a rapid move to emergency response teaching (ERT) and expanded online learning. This literature review examines several important areas to provide context for this transition's effect on faculty and their teaching practices. First, it considers how ERT influenced faculty motivation and engagement, exploring how the sudden change impacted their approach to developing and delivering online course materials. It also examines how faculty adapted their teaching methods during the pandemic. The review focuses on the new practices and technologies faculty and universities adopted and how these tools support online and hybrid learning. Additionally, it considers the challenges and supports faculty encountered while implementing online course content.

The review also explores theoretical perspectives that shed light on these changes, including the TAM, SDT, and self-efficacy. These frameworks help explain faculty perceptions of technology adoption, shifts in motivation, and the role of professional development in strengthening instructional practice. Finally, the review examines the most effective elements of professional development programs in enhancing online and hybrid teaching. By addressing these areas and theoretical perspectives, the literature review provides a context for how the pandemic shaped teaching practices and faculty development in higher education.

Impact of Covid-19 on Higher Education

The COVID-19 pandemic led to unprecedented disruptions in higher education. Universities worldwide pivoted rapidly to online and hybrid models of instruction to

maintain educational continuity and adhere to health guidelines. At the outset of the pandemic, in the spring of 2020, institutions adopted various learning modalities, such as fully online, hybrid, and video conferencing, to accommodate social distancing recommendations and ensure the continuity of educational activities. This rapid shift necessitated significant changes in institutional policies and faculty training (Lach et al., 2021). UNESCO highlighted the scale of this disruption, noting that at the pandemic's peak, educational institutions for approximately 1.6 billion students worldwide were closed, affecting nearly 94% of the global student population across over 190 countries (Karsenti et al., 2020).

The shift to online education required faculty to adapt quickly. Typically, educators new to online teaching undergo specific training; however, the pandemic forced even experienced online instructors to transition their courses within two weeks or less (Lach et al., 2021). This urgent shift also prompted institutions to enhance their digital strengths (Mospan, 2023).

Despite these efforts, many faculty members faced challenges due to inadequate support from their institutions. Nokkala et al. (2023) reported dissatisfaction among faculty regarding their institutions' lack of support during the pandemic. Additionally, North American faculty perceived pressure to return to traditional on-campus instruction despite the successful adaptation to online formats (Nokkala et al., 2023).

Emergency Remote Teaching

What students experienced during the spring and fall of 2020, was not online learning. Online learning is often viewed by some in education as inferior to traditional classroom education, even though studies suggest that prejudice is not valid. The rapid shift to online platforms by numerous institutions might reinforce this pessimistic view, making it seem like a less effective choice. However, the reality is that these quick transitions do not allow

educators to fully utilize the benefits and opportunities that online learning can offer (Hodges et al., 2020). The concept of ERT emerged as a critical response strategy during the pandemic. This approach is characterized by four phases, beginning with a rapid transition to platforms like Zoom and progressing toward enhancing course basics, technical infrastructure, and support systems for maintaining academic integrity and equitable access (Solberg & Tømte, 2023).

Quality assurance in online education extends beyond technological support to encompass academic strategy and educational design (Gamage et al., 2020). The pandemic highlighted a significant gap in online instructional skills among educators, which negatively affected the quality of education and community building in online settings (Orozco et al., 2023). These studies highlight the need for consistent and continued professional development to prepare faculty for pivoting education to another modality.

Positive Impacts and Future Directions

Despite numerous challenges, the pandemic also presented opportunities for positive changes in higher education. Studies have shown that hybrid, blended, and online learning can enhance students' abilities to acquire knowledge and adapt to flexible learning environments (Tee et al., 2022). This period of ERT has underscored the importance of resilience and adaptability to significant changes in educational delivery. Moreover, numerous institutions extended their virtual offerings beyond just classes. For instance, many implemented mental health tele-counseling, virtual testing centers, and online academic and career counseling sessions. These digital services engaged students, highlighting the crucial role of accessibility even beyond the challenges posed by the pandemic (Baston, 2021).

The most significant positive impact of COVID-19 was integrating and utilizing technology within higher education. Most educational institutions adopted e-learning, and

numerous institutions seized this opportunity to deliver lessons in engaging and interactive ways. Educators could quickly learn and explore new methods to present their course content and connect with students from afar (Yaseen & Joshi, 2021).

Post-pandemic educational strategies have presented contradictory perspectives on how best to engage students and facilitate learning. Malesic (2022) identifies a common set of challenges observed during the pandemic — such as absent students, late assignments, and lackluster class discussions — and suggests these issues stem from the shift away from traditional classroom environments. He advocates for a return to the pre-pandemic educational framework, emphasizing the necessity of reinstating in-person classes and maintaining high academic expectations. Malesic frames the debate as a simple choice: either completely retract pandemic-era accommodations or integrate them permanently. He urges stakeholders to opt for the former to "rebuild" students' learning capabilities. Conversely, Warner (2022) acknowledges the merits of face-to-face interactions, particularly in contexts like writing coaching, but critiques Malesic's view as overly simplistic and reflective of a broader, outdated mindset that idealizes a return to pre-pandemic norms without considering the potential benefits of new educational models.

Further expanding on the discussion, Qamar (2021) suggests that while virtual teaching and learning have proven to be more than just temporary solutions during the pandemic, it is an oversimplification to predict a future of exclusively virtual education. Qamar's commentary highlights the continued relevance of traditional, physical university settings alongside digital platforms. Supporting this notion, Tilak and Kumar (2022) propose that integrating both in-person and online learning—blended learning—may be a temporary adjustment and could evolve into a standard educational practice in the coming years. This approach indicates a shift

towards more flexible and adaptable learning environments that accommodate diverse student needs and technological advancements.

Technology Acceptance Model

The technology acceptance model (TAM) is a widely used theoretical model in research regarding technology use in higher education. "Davis (1989) introduced and developed the technology acceptance model (TAM) and provided a theoretical context that could explain the relationship of attitudes-intention-behavior" (Alfadda & Mahdi, 2021, p. 886). TAM has been widely used to explain how individuals decide whether to adopt new technologies by focusing on key factors such as perceived usefulness and perceived ease of use. In educational research, the model has helped scholars examine how faculty and students evaluate and adopt digital learning tools.

Core Components of TAM

TAM proposes that two main variables, perceived usefulness (PU) and perceived ease of use (PEU), determine an individual's intention to use and subsequent usage of technology (Davis, 1989). PU refers to the degree to which an individual believes using a specific system would enhance their job performance. At the same time, PEU denotes the degree to which a person believes using the system will be effort-free (Bahar et al., 2022). "These two perceptions, PEU and PU, directly relate to another TAM-core variable, attitude towards technology (ATT). Most commonly, the TAM comprises at least one outcome variable, behavioral intention (BI) and technology use (USE)" (Scherer et al., 2019, p.15). "Davis (1989) proposed that PU and PEU are precursors to BI that results in actual usage (AU) among users" (Rosli & Saleh, 2022, p. 18217). Within the TAM framework, attitudes towards technology, shaped by PU and PEU,

lead to behavioral intentions that predict actual system use. This pathway explains how educators and students accept and integrate technology into their practices (Rosli & Saleh, 2022).

TAM Application in Educational Research

TAM is widely applied to understand the acceptance of e-learning technologies among educators and students. Its appeal lies in its simplicity and the real-world data consistently showing how well it predicts user engagement with information systems (Scherer et al., 2019). This fact has made TAM a favorite among researchers looking to assess new technologies in educational settings (Bahar et al., 2022).

Despite its widespread use, TAM has faced criticism for its simplicity and the narrow scope of factors considered. Critics argue that the model's predictive validity could be more robust for the complexities of modern technological adoption scenarios (Lim, 2018).

Researchers have extended TAM by incorporating external factors such as computer self-efficacy, social norms, perceived enjoyment, and system and information quality to better explain technology adoption in specific educational contexts (Salloum et al., 2019).

Recent studies have emphasized the importance of external factors such as organizational support, cultural configuration, and trustworthiness. These factors significantly affect the PU and PEU, thereby influencing technology acceptance. For instance, confidence in the reliability of social media platforms and adequate technical support are crucial in fostering acceptance among users (Rauniar et al., 2014; Drueke et al., 2021). These findings apply to educational technologies and the support needed to gain acceptance and consistently use these tools.

Self-Determination Theory

Self-Determination Theory (SDT) explains human motivation through the fulfillment of three basic psychological needs: autonomy, competence, and relatedness (Deci & Ryan, 2000;

Ryan & Deci, 2017). Autonomy refers to an individual's sense of control over their actions, competence reflects the ability to effectively perform tasks, and relatedness involves meaningful connections with others (Ryan & Deci, 2020). These needs are essential for fostering intrinsic motivation and sustained engagement, particularly in educational environments (Niemi & Ryan, 2009; Ryan & Deci, 2017). Within higher education, SDT has been used to understand how faculty motivation is influenced by instructional practices, institutional support, and perceptions of teaching effectiveness (Ryan & Deci, 2017).

Theoretical Foundations of SDT

SDT proposes that motivation and psychological health are contingent upon satisfying three innate and universal psychological needs: autonomy, competence, and relatedness (Chiu, 2022). These needs are thought to foster an intrinsic motivation to learn and grow, essential for effective teaching and learning. SDT articulates that individuals are more likely to engage in activities that support these needs, whereas failure to support them can lead to reduced motivation and well-being (Stupnisky et al., 2018).

The need for autonomy involves feeling self-directed in one's actions, whereas competence involves feeling effective and capable within one's environment. These needs are particularly pertinent in educational settings where faculty and students assert their capabilities and make meaningful choices about their learning and teaching practices (Ten Cate et al., 2011). Faculty, when autonomous, are more likely to implement innovative and effective teaching strategies and engage deeply with their instructional roles (Deci et al., 1997).

Relatedness refers to the need to feel connected to others, which can enhance collaboration and the sense of community among faculty and students in the context of higher education. Stupnisky et al. (2018) note that teaching can fulfill the need for relatedness through

interactions that allow professors to interact meaningfully with colleagues and students. This connection is vital for fostering a supportive learning environment and enhancing teaching effectiveness.

Application to Faculty Development and Online Learning

SDT has significant implications for faculty development, particularly in promoting engagement with new educational strategies and technologies. Aelterman (2016) suggests that satisfying educators' psychological needs increases their receptivity to and engagement with professional development initiatives. Furthermore, the theory has been extended to online learning environments, where the creation of autonomy-supportive environments can significantly enhance students' motivation and learning outcomes (Hsu et al., 2019).

Research has consistently supported the application of SDT in educational settings, demonstrating that when the needs for autonomy, competence, and relatedness are met, both faculty and students exhibit higher levels of intrinsic motivation, which correlates with better educational outcomes. Jeno et al. (2019) found that need satisfaction enhances intrinsic motivation and well-being in various learning contexts, including mobile and simulation learning, suggesting that these findings are also applicable in online and hybrid learning environments.

Self-efficacy

Integrating educational technologies into teaching practices has become increasingly vital in higher educational environments. A key psychological factor influencing these technologies' adoption and effective use is self-efficacy, a concept developed by Albert Bandura in 1977. Self-efficacy refers to individuals' beliefs in their capabilities to execute actions required to achieve specific outcomes, significantly affecting their choices, efforts, perseverance,

and resilience in the face of obstacles. This theoretical framework, particularly in the context of education, suggests that educators with higher self-efficacy are more likely to embrace and effectively utilize new technologies, thereby enhancing teaching quality and student outcomes. This literature review explores the intersection of self-efficacy and technology adoption in educational settings, highlighting how self-efficacy enhances targeted professional development programs and the subsequent impact on educational practices.

Theoretical Background

Self-efficacy, as conceived by Albert Bandura, is a fundamental psychological construct that influences human behavior across various settings, particularly in education. It refers to an individual's belief in their ability to perform a task successfully. Bandura proposes that self-efficacy affects the choices people make, the effort they put forth, how long they persevere in the face of obstacles, the resilience they show in overcoming setbacks, and their ultimate level of success (Bandura, 1997).

According to Bandura (1986), self-efficacy is derived from four sources: mastery experiences, vicarious experiences, social persuasion, and physiological and emotional states. Mastery experiences involve interpreting the outcomes of past actions to assess one's capability. When individuals view their past experiences as successful, their confidence in their abilities, or self-efficacy, increases. Conversely, perceiving past experiences as failures tends to decrease self-efficacy. People also develop their sense of self-efficacy by observing others performing similar tasks, especially when they have limited experience. They look to these role models, noting similarities in age, gender, or experience, which can strengthen their belief in their abilities. Another way individuals build self-efficacy is through social persuasion, which includes encouragement from essential figures like parents, peers, and faculty. Positive feedback

encourages more significant effort and helps overcome doubts. The final factor affecting self-efficacy is one's physiological and emotional states (Waddington, 2023). According to Bandura, feelings of anxiety, stress, fatigue, and overall mood can negatively impact one's self-efficacy.

Influence on Utilizing Technology and Professional Development

Professional development programs that incorporate mastery experiences, such as follow-up coaching, significantly boost self-efficacy among educators. Tschannen-Moran and McMaster (2009) found that such formats enhance the adoption of new teaching strategies and improve instructional self-efficacy. This finding underscores the importance of structured support in professional development initiatives.

Self-efficacy beliefs are crucial in professional development settings, influencing faculty participation and training programs' effectiveness. Tschannen-Moran and McMaster (2009) emphasize that self-efficacy can be bolstered through professional development activities designed to provide mastery experiences, which are the most potent sources of self-efficacy according to Bandura's framework. Research by Zheng et al. (2018) shows that organizational support enhances faculty self-efficacy. Continuous professional development tailored to fostering self-efficacy, especially in technology use, remains crucial for future research and practice.

The literature consistently supports the idea that self-efficacy influences teaching quality and educational outcomes. For example, higher teacher self-efficacy is associated with the use of higher-quality teaching strategies, which in turn enhances student motivation and learning outcomes (Holzberger & Prestele, 2021; Lauermann & Berger, 2021). Additionally, studies highlight the role of self-efficacy in sustaining faculty through the challenges of online teaching environments (Horvitz et al., 2015).

Self-efficacy significantly impacts faculty adoption of new teaching strategies and technologies. Faculty with high self-efficacy are more likely to implement innovative teaching methods and embrace changes necessitated by developments such as online education (Horvitz et al., 2015). This technology self-efficacy, or faculty belief in their ability to use educational technologies effectively, is a significant predictor of technology adoption in educational settings. Studies have shown that faculty with higher technology self-efficacy are likelier to utilize educational technologies such as flipped classrooms and online learning platforms (Long et al., 2018; Koral et al., 2017; Khan et al., 2018).

Faculty Professional Development

Professional development in higher education is crucial for adapting teaching practices, beliefs, and learning outcomes. Guskey (2002) describes it as organized efforts to change classroom practices and enhance student learning. The shift to ERT during the COVID-19 pandemic has significantly influenced faculty professional development, highlighting its role in adapting to digital education environments.

Before the pandemic, the integration of educational technologies in teaching was limited, often due to the perceived high workload and inadequate value seen by the faculty (Gonzales et al., 2023). The forced shift to online teaching during the pandemic made professional development essential, not optional, prompting faculty to engage more deeply with these technologies. The pandemic posed unique challenges for faculty transitioning to online teaching. Studies by Solberg and Tømte (2023) and others revealed a significant lack of digital competencies among faculty during the early phases of the pandemic. However, subsequent semesters showed improvement as faculty members adapted, often through self-initiative or peer collaboration rather than institutional support.

Despite the challenges encountered during the pandemic, faculty recognized the benefits of integrating digital tools and approaches into their traditional teaching practices. Many expressed intentions to continue using strategies such as flipped learning, in which students review instructional content before class and use class time for discussion or applied activities, and pre-recorded materials to enhance student engagement and flexibility (Power et al., 2023). This intention to continue to utilize these tools for course content development means that institutions must find ways to keep faculty attending and engaged with professional development even when they are not facing a crisis. Studies show that faculty often prefer personalized and just-in-time training approaches that allow them to integrate new technologies seamlessly into their teaching practices (Polly et al., 2021). Additionally, combining online and hands-on training opportunities can enhance the application and retention of skills acquired during professional development sessions (Witcher & Sasso, 2024).

The Integration of TAM, Self-Efficacy, and SDT in Educational Research

Technology

Integration of TAM and SDT

Integrating psychological components with technological acceptance in educational research has been a focal point of contemporary studies. Racero et al. (2020) argue that SDT is compatible as an external variable for the TAM, offering a robust framework for examining both technological acceptance and psychological components in educational settings (Rosli & Saleh, 2022). This integration highlights the potential for a more comprehensive understanding of how educational technologies are adopted and utilized.

Researchers have explored the motivation behind technology adoption by combining SDT and TAM across various contexts. For example, Chen and Zhao (2022) examined how

motivation influences students' continued use of learning technologies by combining the Technology Acceptance Model with Self-Determination Theory. Their analysis showed that students' motivations, such as social recognition or enjoyment of learning, shaped their perceptions of whether educational technologies were useful and easy to use, which in turn influenced their intention to continue using those technologies. Studies have shown that users' perceptions of ease of use and usefulness correlate with the tool's ability to satisfy needs for competence and autonomy, promoting autonomous motivation.

Chen and Zhao (2022) find students' controlled motivations, such as seeking good grades or social recognition, positively affect their perception of technology as useful and easy to use in massive open online courses (MOOCs). Conversely, autonomous motivation, driven by enjoyable learning experiences, enhances students' perceptions of virtual laboratories and e-learning systems as valuable and easy to use.

Self-Efficacy and TAM

Scherer and Siddiq (2015) emphasize that faculty self-efficacy can significantly influence perceived ease of use. They suggest that self-efficacy impacts beliefs about how individuals can perform tasks using technology, thereby influencing PEU (Scherer et al., 2019). Furthermore, self-efficacy in using technology is closely linked to the core variables of TAM, suggesting it can act as either a barrier or an enabler for technology use in educational contexts (Scherer et al., 2019). Alzahrani (2023) found that faculty self-efficacy has a more significant and positive effect on PU in adopting learning-oriented technology (LoT) than on PEU. The study shows that the more comfortable faculty members are with technology, the more intuitive, adaptable, and efficient the tool becomes for their work. These findings align with those of Isaac et al. (2017),

who discovered that self-efficacy enhances both PEU and PU, which strongly influences the adoption of technology tools.

Scherer et al. (2019) argue that training approaches aimed at improving PU and PEU should also focus on enhancing faculty self-efficacy in using technology. This link is supported by cross-sectional studies indicating a relationship between faculty self-efficacy in technological and pedagogical content knowledge, PEU, and PU (Mei et al., 2017).

Summary

In conclusion, the COVID-19 pandemic significantly reshaped higher education and generated an extensive body of research examining its effects on teaching and learning, including student performance, access to technology, attendance, and instructional delivery. Within this broader scholarship, the rapid transition to ERT revealed both the possibilities and limitations of digital instruction. These developments contributed to growing recognition of technology as an integral component of higher education pedagogy rather than a supplemental tool. The pandemic accelerated experimentation with online and hybrid approaches and prompted institutions and faculty to reconsider how technology could support more flexible and resilient instructional models.

Understanding how faculty experienced and adapted to these changes requires a research design capable of capturing the complexity of instructional decision-making during and after the pandemic. The following chapter outlines the methodology used in this study, including the qualitative case study design, participant selection, and data collection methods. It also describes the use of semi-structured interviews and syllabi analysis, as well as the coding and thematic analysis procedures used to interpret the data. Finally, the chapter discusses measures used to ensure trustworthiness and credibility, along with the study's limitations and delimitations.

Chapter 3 - Methodology

Introduction

This chapter outlines the research design and methodology that guided this study about the perceptions and experiences of faculty members about teaching online at a large midwestern university during and after the COVID-19 pandemic. As The pandemic disrupted traditional educational practices and it became essential to understand how faculty adapted their teaching to accommodate the shift to emergency remote teaching (ERT) and subsequent online and hybrid formats. This study provides insight into general patterns in faculty motivation, engagement, and retention of effective teaching practices introduced during this period.

A qualitative case study approach enables an in-depth examination of faculty members' experiences and the factors influencing their teaching practices. I collected data using semi-structured interviews with faculty and administrators and text analysis of syllabi. This data provided a triangulated view of how faculty members adapted to new instructional technologies, pedagogical approaches, and institutional support during the pandemic. Purposeful and snowball sampling methods were employed to select participants who had taught before and after the pandemic to ensure representation from diverse perspectives across disciplines and teaching backgrounds.

This chapter further details the data collection and analysis procedures, including coding and thematic analysis, that were used to examine interview responses and syllabi changes. Additionally, measures to ensure the trustworthiness and credibility of the research, such as member checking and maintaining an audit trail, were discussed. Ethical considerations, including informed consent and confidentiality, were also outlined to ensure that the study

adhered to standards of academic integrity. Finally, the study's limitations and delimitations acknowledged potential challenges and the boundaries within which the research was conducted.

Research Design

This study utilized a qualitative research methodology. Qualitative research was particularly suited for this study because it enabled an in-depth exploration of complicated circumstances. The transition to ERT during the pandemic was an unprecedented experience. Qualitative methods provided the flexibility needed to capture the nuances of faculty adaptation, engagement, and teaching practices. One of the primary strengths of qualitative research is its ability to gather detailed data from participants, allowing researchers to gain a deep understanding of personal experiences and the environmental variables that influence them. In this study, semi-structured interviews allowed participants to share their insights and reflections on the shift to online and hybrid teaching. These interviews allowed participants to discuss their challenges, motivations, and strategies, which may not be captured through quantitative methods alone.

Qualitative research is particularly effective for exploring how individuals make sense of their experiences (Thompson & Martin, 2023). The study aims to understand faculty perceptions of institutional support, teaching practices, and the impact of technological tools. A qualitative approach allowed for developing themes and patterns based on participants lived experiences. Syllabi analysis complemented the interviews, providing supporting documentation of changes to course design and content delivery. This combination of data sources provided a holistic view of faculty adaptation, making qualitative research the most appropriate methodological choice for this study.

Case Study Approach

This study utilized a single case study research method for several reasons. A case study approach was particularly suited to this research because it allowed for an in-depth examination of complex phenomena within their real-life situations (Yin, 2018). The research explored the experiences and perceptions of faculty members regarding changes in their course content delivery methods since the onset of the COVID-19 pandemic. . The case study approach allowed for a broad examination of the factors influencing faculty members' navigation of the abrupt shift to online teaching and learning environments during the pandemic and the changes in their teaching practices. Given the unique circumstances of the COVID-19 pandemic and its impact on higher education, a case study provided the flexibility to explore these dynamics in depth.

The case study design was well-suited for addressing the research questions. The design enabled the collection of qualitative data through interviews and document analysis, offering insight into faculty members' motivations, challenges, and strategies during this transition (Merriam, 1998). This approach also facilitated the integration of multiple data sources, including semi-structured interviews and syllabi analysis. This triangulation enhanced the credibility and validity of the findings by providing a comprehensive view of the phenomenon under investigation (Creswell & Poth, 2018).

Case Study Description. A large midwestern research institution served as the setting for this case study. The university is a public research institution in the Midwest that enrolls more than 20,000 students and offers a broad range of undergraduate and graduate programs across disciplines including engineering, business, education, and the arts and sciences. In March 2020, the university halted in-person instruction as institutions across the United States responded to the COVID-19 pandemic. Faculty were required to move courses online within

days, forcing many instructors with little prior online teaching experience to quickly adapt lectures, assignments, and communication practices for remote instruction. The focus on this university provided a representative and insightful context for examining how faculty members adapted to the rapid shift. The university's investment in educational technologies and professional development made it an ideal case for exploring the effectiveness of different teaching methods and technologies in enhancing online and hybrid education.

The university's response to the pandemic, including the support provided to faculty and the changes in teaching practices, offer a valuable opportunity to study the long-term implications of ERT on higher education. By examining faculty members' experiences, this research aimed to contribute to the broader understanding of how universities can effectively support faculty in transitioning to and sustaining online and hybrid teaching practices.

Research Questions

The study was guided by the following research questions:

1. How have faculty adapted their teaching methods in response to the transition to online teaching due to the COVID-19 pandemic?
2. What teaching practices and technologies have faculty members adopted since the pandemic, and how do they perceive the effectiveness of these practices in enhancing online and hybrid course delivery?
3. What barriers have faculty identified in the transition to and implementation of creating online course content?
4. What facilitators have faculty identified in the transition to and implementation of creating online course content?

5. What aspects of professional development programs are most effective in supporting faculty members' transition to and enhancement of online and hybrid teaching?

Participant Selection

This study used purposeful sampling to recruit faculty members who had taught both before and during the COVID-19 pandemic at a large midwestern university. The initial goal was to recruit 16 faculty participants who could provide insight into how teaching practices changed during the transition to online and hybrid instruction. The study targeted the university's largest campus and included representation from four colleges: Arts and Sciences, Education, Business, and Engineering. An intentional balance was sought between faculty who had taught online prior to the pandemic and those who had not, allowing for meaningful comparison of adaptation experiences. Recruitment emails were first distributed to department heads across several academic departments. Through this purposeful sampling process, nine faculty members agreed to participate.

Because the initial recruitment did not produce the target number of participants, additional recruitment strategies were used. Snowball sampling was first implemented, in which participating faculty recommended colleagues who met the study criteria. This process resulted in three additional faculty participants.

After these steps, the study still required additional participants to reach the target sample size. The study protocol was therefore amended and approved by the Institutional Review Board (IRB) to allow recruitment of faculty who had participated in the university's 2020 Online Course Design Institute (OCDI), a professional development program focused on online course design during the pandemic. Invitations were sent to faculty who had participated in the institute,

resulting in four additional faculty participants, bringing the final faculty sample to 16 participants.

In addition to faculty interviews, the study also included five administrators to provide institutional perspectives on the university's response to the rapid transition to remote instruction during the pandemic. Administrators were identified based on their roles in instructional leadership, faculty support, or institutional decision-making related to online and hybrid teaching. Participants were selected through the researcher's knowledge of individuals involved in these efforts as well as recommendations from colleagues familiar with the university's pandemic response.

Purposeful Sampling

Purposeful sampling involved selecting participants who were most likely to provide substantial and relevant data. For this study, participants were purposefully selected based on the following criteria:

- **Experience with higher education teaching:** Faculty members who had taught both before and during the COVID-19 pandemic in order to provide comparative insights.
- **Diverse disciplines:** Faculty from different academic departments were included to capture a range of experiences and instructional approaches.
- **Levels of experience:** Both seasoned faculty and those newer to teaching were included to better understand varied responses to the shift to online and hybrid education.

The inclusion of faculty who participated in the 2020 Online Course Design Institute strengthened the sample by ensuring representation of instructors who had engaged in formal

professional development specifically focused on online course design during the emergency remote teaching period.

Snowball Sampling

Snowball sampling, also known as chain-referral sampling, was utilized as a supplemental recruitment strategy. In this non-probability sampling approach, initial participants were asked to recommend colleagues who met the study criteria and who might be willing to participate (Etikan et al., 2016). This strategy relied on professional networks and referrals and proved helpful in reaching faculty who may have otherwise been hesitant to volunteer.

In qualitative case studies, sample sizes are typically kept small to allow for in-depth exploration while remaining large enough to capture a wide range of experiences (Vasileiou et al., 2018). A total of 16 faculty members served as the sample for this study. This size was strategically selected to enhance variability and representation across disciplines, teaching experience levels, prior online teaching exposure, and professional development backgrounds.

Criteria for Inclusion

Faculty participants were required to meet several inclusion criteria to ensure that they had relevant experience with the transition to online teaching during the COVID-19 pandemic. Faculty members were required to be currently employed at the selected large midwestern university at the time the study was conducted. Interviews for this study were conducted during the spring and summer of 2025, and participants were required to have taught at the university both before the pandemic and during the transition to emergency remote teaching. This requirement ensured that participants could reflect on instructional practices before the pandemic as well as the changes implemented during and after the shift to remote instruction.

Recruitment Plan

Recruitment began with emails sent to department heads explaining the study's purpose, anticipated time commitment, and potential benefits of participation. Interested faculty were screened using questions aligned with the established inclusion criteria, and final participants were selected based on this information. When initial recruitment efforts did not produce a sufficient number of participants, IRB approval was obtained to expand recruitment to faculty who had participated in the 2020 Online Course Design Institute. Snowball sampling was then implemented by asking confirmed participants to refer colleagues who met the criteria and might be interested in participating. The researcher sought to ensure disciplinary diversity and variation in teaching experience across the final sample.

Once participants were selected, confirmation emails were sent providing detailed information about the study, including the interview process, document review procedures, and confidentiality protections. The selection and recruitment process adhered to ethical guidelines, including obtaining informed consent, maintaining confidentiality, and ensuring that participants could withdraw from the study at any time without penalty.

Data Collection

This study used semi-structured video conferencing interviews with faculty members and administrators to gather data. These interviews allowed flexibility in probing participants' experiences while maintaining a consistent structure across interviews. Additionally, an analysis of syllabi changes before and after the pandemic was conducted. The goal of this document analysis will be to examine course policies and procedures that may have impacted content.

Semi-Structured Interviews

Semi-structured interviews were used to explore faculty members' perceptions and experiences related to the transition to online and hybrid teaching. This interview format uses predetermined open-ended questions while allowing the interviewer to ask follow-up questions for clarification or deeper explanation (Jamshed, 2014). The approach provided enough structure to ensure that key topics related to the research questions were addressed while also allowing participants the flexibility to describe their experiences in their own words.

Interviews allowed for more personal and engaging interaction than other remote data collection methods such as email or online surveys. The interviews were conducted via Zoom to allow for greater flexibility and because participants were familiar with this tool due to its utilization during the pandemic. Video conferencing enables the collection of visual and non-verbal data, which can improve the understanding of participants' responses. Non-verbal cues such as facial expressions, gestures, and body language can provide additional context to verbal responses. This additional layer of data was particularly valuable in understanding the impacts of the pandemic on faculty members' teaching practices and well-being. The visual and auditory cues available also helped build rapport between the interviewer and participants.

Preparation for Interviews. Interview preparation included several steps essential for ensuring accuracy and ethical compliance. The initial phase involved the development of an interview guide (Qualtrics, 2023), which featured a list of primary and related questions aligned with the research objectives. This guide served as the foundational framework for data collection. Following the creation of the interview guide, a pilot test was conducted to refine the questions, ensuring their clarity, relevance, and effectiveness in eliciting the desired information. Based on the pilot test, questions were revised to be less leading. Securing ethical approval is an

important step in the research process. This requires obtaining clearance from the university's Institutional Review Board (IRB) to ensure that the study adheres to established ethical standards and protects the rights and well-being of participants. After receiving IRB approval, participants were recruited. This involved employing purposeful sampling to identify participants who could provide thorough, relevant data, followed by snowball sampling to ensure a diverse, representative, sufficiently large sample.

The scheduling of interviews required a standardized approach. This process began by contacting the selected participants and sending formal invitations. These invitations included detailed information about the study, consent forms, and potential interview dates to facilitate informed participation. It was crucial to confirm the participation of each respondent to ensure a well-organized and efficient interview schedule.

Interviews. The interview process required attention to detail and an organized process to ensure the collection of accurate and meaningful data. Before starting each interview, the interviewer reviewed the consent form with the participant and obtained their verbal consent. This step ensured compliance with ethical standards and that participants were fully informed about the study's nature and purpose. Once the participant gave their consent, the interview began.

Interviews were conducted via Zoom, utilizing its video conferencing capabilities. Each session was secured with a unique, password-protected URL and a waiting room feature, ensuring that only the intended participant was granted access by the interviewer. This approach guaranteed confidentiality and minimized distractions, creating a space where people could speak openly and honestly. With the participant's consent, the interviews were recorded using

Zoom and transcription features. This practice was essential for accurate data collection and allowed for thorough analysis of the responses.

The interview began with general questions to build rapport with the participant. Following this, the interview guide was used to guide the conversation while allowing flexibility for participants to explore related topics that may arise. Notes were taken during the interview to help capture key points and non-verbal cues that may not be evident in the audio or video recording. This multi-faceted approach ensured a more in-depth understanding of the participants' perspectives.

Post-Interview Process. Once each interview was completed, the video recording and interview notes were saved securely. The interviews were recorded through Zoom, and Zoom's automated transcription feature was used to generate an initial transcript of each interview. The researcher reviewed each transcript while listening to the recording to correct transcription errors and ensure accuracy.

All recordings, transcripts, and notes were stored in password-protected folders on the researcher's university-provided Microsoft OneDrive account, accessible only to the researcher. After transcripts were finalized, member checking was conducted by sending the transcripts to participants for verification. This process allowed participants to review the transcripts and confirm that their responses were accurately represented (Birt et al., 2016). Member checking helped strengthen the credibility of the research and ensured that participants' intended meanings were preserved.

Syllabi Analysis

Reviewing syllabi in this study was essential to understanding the changes in course content delivery methods utilized by faculty since the onset of the COVID-19 pandemic. This approach provided a deeper perspective on how faculty navigated the challenges of ERT and subsequent shifts in instructional practices. Syllabi are foundational documents outlining a course's structure, objectives, and content. They reflect the pedagogical strategies and assessment methods determined by faculty to achieve educational goals. By analyzing these documents, the researcher was able to identify changes in teaching practices and course design in response to the pandemic. This information included modifications in course objectives, learning outcomes, delivery formats, assessment techniques, and the incorporation of digital tools and resources.

Reviewing syllabi also allowed triangulation of data to support the study's findings. While interviews provided insight into faculty experiences and perceptions, syllabi offered documented evidence of how course delivery and instructional practices were formally structured. Comparing interview responses with syllabus content allowed the researcher to examine whether reported changes in teaching practices were reflected in official course materials. This comparison helped identify both continuity and differences between ERT practices and the approaches faculty later adopted as part of more sustained online or hybrid teaching strategies.

The criteria for selecting syllabi were aligned with the participant selection criteria to ensure consistency between interview data and document analysis. Syllabi were requested from all participating faculty members; however, not all participants were able to provide course documents despite follow-up requests. As a result, eight paired syllabi sets were obtained for analysis, each consisting of one pre-pandemic syllabus and one post-pandemic syllabus from the

same course or instructor. Pre-pandemic syllabi were typically drawn from courses taught prior to Spring 2020 (e.g., Fall 2019), while post-pandemic syllabi were drawn from courses taught Spring 2021 or later, when faculty had begun incorporating more sustained online or hybrid teaching practices. These paired documents allowed for direct comparison of course structure, policies, instructional methods, and technology use over time

Data Analysis

Thematic analysis was used to identify and analyze patterns within the qualitative data collected from interviews with faculty and administrators, and syllabi. This method involves coding the data and developing themes that capture key aspects of faculty experiences and perceptions (Braun & Clarke, 2006). Interview transcripts and syllabi were initially coded separately and then compared during the analysis process. Themes identified in faculty interviews, such as changes in communication practices, course structure, and technology use, were examined alongside syllabus content to determine whether reported instructional changes were reflected in course documents. Administrator interviews were used to provide institutional context and to help interpret how institutional decisions and support structures influenced faculty adaptation during and after the transition to ERT.

Coding and Thematic Analysis Plan

This section outlines the approach utilized for coding and thematic analysis of the qualitative data gathered through semi-structured interviews with faculty and administrators. The coding and thematic analysis process helped identify key patterns, themes, and insights across participant responses, ensuring that the research questions were adequately addressed.

Coding Process

Open coding allowed for the identification of recurring topics. The initial codes led the researcher's thoughts to smaller units of meaning in the data. These codes were not constrained by pre-determined categories, allowing flexibility and openness to various insights. The open coding process was conducted using qualitative data analysis software NVivo, which assisted in organizing and managing the data for further analysis. Throughout this process, codes were consistently applied to each transcript, ensuring that important concepts were captured from all participants' responses.

Following the open coding stage, axial coding was utilized to group related codes into larger, more coherent categories. Axial coding helped to bring like ideas together to recognize relationships between the initial codes and provide a structured way of organizing the data (Simmons, 2017). At this stage, connections between different codes were explored, allowing for a deeper understanding of faculty's underlying issues during the transition to online teaching. This process also facilitated the identification of central themes that linked the various challenges described by participants. Through this analysis, the researcher examined how these themes related to one another and how they shaped faculty experiences during the transition to online and hybrid teaching. This structured approach provided a comprehensive framework for interpreting the factors influencing faculty adaptation to new teaching practices.

Thematic Analysis

After completing the axial coding phase, the next step was to conduct a thematic analysis to identify the key themes that capture the core issues and experiences shared by participants. This process involved merging the coded data into broader, more meaningful themes that align with the study's research questions. Thematic analysis was ideal for this study because it offers a

flexible, iterative way to uncover patterns and insights within complex qualitative data (Braun & Clarke, 2006).

The focus was on identifying themes that directly related to the research questions, such as faculty adaptation to online and hybrid teaching, perceptions of institutional support, and evolving motivation and engagement. These themes were developed through careful review of the codes and categories identified during the axial coding process to determine how they collectively represented faculty experiences. Each theme was mapped to the core research questions to ensure the findings illuminated how ERT and post-pandemic conditions influenced faculty motivation, instructional practices, and technology integration over time. Throughout this stage, themes were refined to ensure they accurately reflected the data and addressed the central issues explored in the study. When appropriate, sub-themes were developed to provide additional depth and clarification.

The thematic analysis was conducted after the interviews were completed and the transcripts were prepared. At that stage, the researcher reviewed the interview transcripts and syllabi and applied the coding process described above to identify patterns across the data. Through this process, related codes were grouped into broader themes that reflected common experiences described by participants. The analysis focused on identifying patterns related to faculty adaptation to online and hybrid teaching, perceptions of institutional support, and the use of instructional technologies during and after the transition to emergency remote teaching. This process provided a structured approach for interpreting how faculty described their experiences with course delivery during and after the COVID-19 pandemic.

Method for Analyzing Syllabi

The syllabi were subjected to a document analysis procedure involving a comprehensive review of each syllabus to identify changes in course structure, content, objectives, and instructional strategies. Document analysis was appropriate for this study because it allowed for the extraction of both overt and underlying information about course design and teaching practices (Bowen, 2009). Rather than examining isolated elements, the analysis considered how course components functioned together to reflect instructional priorities and evolving approaches to teaching. Particular attention was given to identifying modifications that emerged in response to the transition to online and hybrid learning formats. Through this process, the syllabi served as a complementary data source that provided tangible evidence of instructional adaptation over time.

One area of focus involved course objectives and learning outcomes. This portion of the analysis examined whether stated objectives shifted in response to changes in modality or instructional delivery. Learning outcomes were reviewed to determine how faculty adjusted expectations for student achievement in online or hybrid environments, including whether outcomes reflected greater flexibility, revised skill emphasis, or changes in assessment alignment. These revisions were considered within the broader context of instructional adaptation, allowing for a clearer understanding of how faculty conceptualized student learning during and after the transition to ERT.

The analysis also examined instructional methods and course delivery. This included reviewing how faculty modified instructional approaches, particularly shifts from in-person to online or hybrid formats and the introduction of new tools or platforms. Changes in lecture structure, assignment submission procedures, and the use of asynchronous content were analyzed

to understand how faculty restructured learning experiences in remote contexts. Rather than simply noting the presence of new technologies, the analysis considered how these adjustments reflected evolving pedagogical decisions and efforts to maintain instructional continuity.

Assessment and evaluation practices were reviewed to identify how faculty adapted grading structures and feedback mechanisms in online and hybrid environments. The study investigated whether faculty revised assessment strategies to align more effectively with digital delivery and remote learning conditions. These adjustments provided insight into how instructors approached student evaluation when traditional face-to-face assessment structures were no longer feasible. In doing so, the analysis illuminated how assessment practices evolved alongside broader instructional changes.

Finally, the document analysis considered the integration of technology and instructional resources within course materials. Syllabi were reviewed to identify the incorporation of digital tools, platforms, and supplemental resources used to support online learning. These included video lectures, collaborative applications, multimedia materials, and online discussion platforms. The analysis examined how faculty leveraged these technologies to facilitate communication, engagement, and access across modalities. Taken together, these areas of review provided a structured yet flexible framework for understanding how course design reflected sustained instructional adaptation in post-pandemic contexts.

Thematic Analysis of Syllabi. After the initial document analysis, the identified changes were coded using a thematic analysis approach similar to those in the semi-structured interviews. The process started with open coding, where specific changes in the syllabi are labeled with initial codes highlighting key modifications. This approach allowed for a close examination of how syllabi were adjusted in response to the pandemic. Once open coding was

complete, axial coding grouped related codes into broader categories, capturing overarching themes. This step helped to synthesize the data from the syllabi into themes that directly address the research questions.

In the final analysis phase, the themes were carefully reviewed and refined to ensure they accurately reflected the changes observed in the syllabi. This process helped confirm that the themes aligned with the documented adjustments in course design and instructional strategies.

Ensuring Trustworthiness and Credibility

Several strategies were used to ensure the trustworthiness and credibility of this study. Triangulation was achieved by drawing on multiple data sources, including semi-structured interviews with faculty and administrators as well as syllabus analysis. Comparing interview responses with course documents allowed the researcher to examine whether reported instructional changes were reflected in course materials. This process strengthened the credibility of the findings by incorporating multiple perspectives and forms of evidence (Creswell & Poth, 2018).

Member checking was also employed to support accuracy and transparency in the research process. After interviews were recorded and transcribed, participants were invited to review their transcripts to verify accuracy and clarify any statements if needed. This process allowed participants to confirm that their perspectives were accurately represented in the data and helped ensure that the transcripts reflected their intended meaning (Lincoln & Guba, 2013).

An audit trail was maintained throughout the research process to document each stage of the study. This record included methodological decisions, data collection procedures, coding development, and the generation of themes. Maintaining this documentation supported the dependability of the research by allowing others to follow the analytic process and understand

how interpretations were developed (Cutcliffe & McKenna, 2004). The researcher also practiced reflexivity by reflecting on personal assumptions and potential biases that could influence interpretation of the data. A reflexive journal was maintained to document analytic decisions and reflections throughout the study (Berger, 2015).

Ethical considerations were also central to the study. The research adhered to Institutional Review Board (IRB) guidelines to ensure participant well-being and data integrity. Standard research practices were followed, including obtaining informed consent, maintaining secure data storage, and protecting participant confidentiality. Identifying information was removed during data collection, analysis, and reporting to protect participant privacy. Participants were informed that their involvement was voluntary and that they could pause or withdraw from the study at any time without penalty.

Delimitations and Limitations

Delimitations

Several delimitations defined the scope of this research. The study focuses on a large Midwest research university to provide a specific context for examining faculty adaptation to online and hybrid teaching during the COVID-19 pandemic. This institution was chosen to offer detailed insights into a particular environment, recognizing that the findings might not apply to universities of different sizes, locations, or student demographics.

Purposeful sampling was used to select faculty participants who have relevant experience teaching both before and during the pandemic. This approach ensured that the study captured in-depth experiences of those directly involved in the shift to online teaching. The study also used a small sample size to allow for a more thorough exploration of these experiences, acknowledging

that this may limit the broader applicability of the findings within the higher education community.

Lastly, the study adopted a faculty-centric perspective, focusing solely on faculty and administrator experiences and excluding the perspectives of students and other institutional support staff. This decision was made to concentrate specifically on the faculty's role in adapting to the rapid transition to online education. By narrowing the scope in this way, the study was able to provide a more focused examination of instructional adaptation during this period. While this approach allowed for deeper insight into faculty experiences, it also limited the range of perspectives included in the analysis. As a result, the findings reflect the faculty viewpoint rather than the broader institutional response to the pandemic.

Limitations

Several limitations may have affected the findings of this study. First, there was potential researcher bias due to the researcher's prior experience training faculty to teach online. This background may have influenced the interpretation of data, particularly regarding expectations for faculty adaptation to online teaching. To address this issue, the researcher engaged in reflexivity, documenting personal biases and reflecting on how they may have affected the analysis.

Another limitation was the primary focus on faculty perspectives. Faculty experiences and perceptions were central to understanding the transition to online and hybrid teaching. However, this focus may have limited the inclusion of additional insights from other groups, such as administrators, instructional designers, and students. These stakeholders could have provided valuable perspectives on how institutional policies and student needs influenced the

effectiveness of online and hybrid teaching practices during the pandemic. The absence of their viewpoints may have limited the comprehensiveness of the study's findings.

Additionally, the study's reliance on self-reported data through interviews posed potential challenges. Participants may not have fully recalled or accurately described their experiences. These limitations could have resulted in gaps or distortions in the data. Although triangulation with syllabi analysis helped verify the findings, this limitation remained a consideration in the study's overall design.

Summary

This chapter described the research methodology used to examine faculty perceptions of changes in course delivery following the transition to online and hybrid teaching during the COVID-19 pandemic at a large midwestern university. A qualitative case study approach was used to explore faculty experiences and institutional responses to emergency remote teaching and subsequent instructional changes. Participant recruitment procedures were outlined, including the use of purposeful and snowball sampling. Data collection included semi-structured interviews with faculty and administrators as well as document analysis of course syllabi. The chapter also described the coding and thematic analysis procedures used to interpret the data. Strategies to ensure trustworthiness, including triangulation, member checking, maintaining an audit trail, and researcher reflexivity, were implemented throughout the study. Ethical considerations, including informed consent, confidentiality protections, and secure data storage, were also addressed to ensure the protection of participants and the integrity of the research process.

Chapter 4 presents the findings from the data analysis. The chapter reports themes that emerged from faculty and administrator interviews as well as the syllabus analysis conducted for this study. The findings are organized according to the major themes identified through the

coding and thematic analysis process, with supporting excerpts from participant interviews and examples drawn from the syllabus review. These themes illustrate how faculty adapted their teaching practices during and after the transition to emergency remote teaching and how institutional factors influenced those adaptations.

Chapter 4 - Data Analysis and Findings

Introduction

The purpose of this qualitative case study is to investigate how faculty at a large midwestern public research university adapted their teaching practices following the COVID-19 pandemic. The study focused on changes in teaching practices, technology use, motivation, and engagement in online and hybrid learning environments. This study aimed to understand faculty experiences during and after the emergency remote teaching (ERT) period and to identify the factors that led to their continued use of educational technologies, instructional design practices, as well as online and hybrid teaching strategies. Data sources included semi-structured interviews with sixteen faculty members, five university administrators, and a document analysis of pre- and post-pandemic course syllabi. Together, these sources provided an understanding of how faculty navigated the transition to online instruction, what barriers and facilitators influenced their decisions, and what changes in teaching practices have continued in their post-pandemic teaching.

This chapter presents the findings of the study and organizes them thematically based on the coding and analytic procedures described in Chapter 3. Analysis of the data resulted in five major themes: faculty adaptation to online and hybrid teaching following COVID-19; growth in technology use, confidence, and teaching self-efficacy; barriers encountered in online course content creation and delivery; facilitators that supported effective teaching practices; and long-term pedagogical shifts shaping future directions in higher education. Each theme is supported by participant statements, identified using participant codes (e.g., P1, P2), as well as relevant document analysis findings where applicable. The chapter concludes with a summary of the

results, which will be further interpreted and connected to the existing literature and guiding theoretical frameworks in Chapter 5.

Participant Overview

Sixteen faculty members participated in this study, representing academic disciplines across four different colleges within the university system. The participants included both tenure-track and non-tenure-track faculty, with teaching experience spanning from early-career instructors to senior faculty with more than twenty years in the classroom. This provided a broad institutional perspective on the transition from ERT to post-emergency online and hybrid teaching practices. Faculty reported teaching in multiple modalities, face-to-face, hybrid, synchronous online, and asynchronous online, before, during, and after the pandemic. Half of the participants had prior experience with online instruction. The other half indicated no online teaching experience before March 2020, resulting in varied learning curves. To protect anonymity, each participant is identified by a numeric code (P1–P16). These identifiers are used throughout this dissertation when presenting direct quotes or describing individual experiences. Table 4.1 summarizes the demographic characteristics of the faculty participants, including years of teaching experience, academic rank, college affiliation, and prior online teaching experience.

Figure 4.1

Participant Demographic Characteristics

Participant	Years of Teaching	Rank/Role	College	Online
P1	13	Assistant Professor	Arts and Sciences	No
P2	10	Instructor	Education	No
P3	20	Teaching Associate Professor	Engineering	No
P4	35	Professor	Arts and Sciences	Yes
P5	8	Associate Professor	Engineering	No
P6	7	Teaching Assistant Professor	Engineering	No
P7	25	Instructor	Arts and Sciences	No
P8	9	Associate Professor	Education	Yes
P9	20	Associate Professor	Arts and Sciences	Yes
P10	9	Professor	Education	Yes
P11	10	Advanced Instructor	Business	Yes
P12	26	Professor	Arts and Sciences	Yes
P13	7	Associate Professor	Business	No
P14	5	Assistant Professor	Business	No
P15	8	Professor of Practice	Business	Yes
P16	15	Associate Professor	Engineering	Yes

In addition to faculty, five administrators participated in this study. These individuals were selected based on their involvement in institutional decision-making, faculty support, and academic operations before, during, and after the COVID-19 pandemic. They represented a variety of roles, including academic leadership, accessibility services, academic technology oversight, and college-level leadership. Collectively, they offered perspectives on institutional policies, resources, communication strategies, and decision-making processes. Their insights helped to better understand faculty experiences during the transition to ERT. Additionally, administrator perspectives highlighted organizational constraints and considerations that influenced instructional change and the continued use of online and hybrid learning modalities. Administrators are identified using alphanumeric codes (A1–A5) to protect anonymity and are referenced throughout this dissertation alongside faculty participant quotes. Table 4.2 shares administrator demographic information.

Figure 4.2

Administrator Demographic Characteristics

Participant	Years in Higher Education	Administrative Role/Division
A1	20	Information Technology
A2	26	College Dean
A3	20	Student Services
A4	35	College Dean
A5	9	College Dean

Study Overview

This study was conducted at a public Midwest university that, like many institutions across the United States, encountered unprecedented challenges at the onset of the COVID-19 pandemic. In March 2020, the university made an institution-wide decision to transition all courses to ERT. Administrator participants described this decision as occurring rapidly, with leadership meeting frequently to assess the ever-changing public health conditions and the academic implications. A5 explained that when the institution “flipped the switch” to ERT, the immediate priority became making “as many resources available as quickly as possible to faculty and staff” to ensure instructional continuity. To facilitate this transition, the university extended spring break by an additional week, providing faculty time to convert courses to remote delivery and assess technology needs.

Institutional leaders simultaneously mobilized technological and instructional support. Administrators described conducting inventories to determine which faculty and students required laptops, monitors, webcams, or wireless access, and equipment was distributed to support ERT and learning. At the university level, the Teaching and Learning Center expanded its online presence adding resources and professional development materials focused on remote instruction. A5 noted that the center “pivoted” its website to centralize instructional support and stood up additional programming to assist faculty with course redesign. Colleges complemented those efforts through frequent communication, including Zoom-based town halls designed to address faculty concerns and reduce feelings of isolation. In some cases, policy adjustments

were also implemented such as optional tenure clock extensions to acknowledge research disruptions and increased workload demands.

Despite these institutional efforts, administrative participants acknowledged differences in faculty preparedness. While some instructors were already comfortable using the learning management system and digital tools, A5 noted that others had “never used Canvas”, or had limited experiences with instructional technologies prior to the pandemic. The quick shift exposed gaps in technological proficiency across units, requiring rapid training and support. Faculty participants similarly described needing to adopt unfamiliar platforms, modify assessment strategies, record lectures, and redesign communication structures in a matter of days. Although the initial response was largely reactive, both faculty and administrators characterized the extended duration of the pandemic as prompting a gradual shift from short-term solutions toward more intentional and sustainable online and hybrid teaching practices. Over time, what began as emergency adaptation evolved into longer-term pedagogical change, with faculty describing instructional adjustments that continued to influence their teaching beyond the immediate crisis.

This sudden shift occurred with little notice, forcing faculty to quickly adapt their courses for a new modality, all while navigating personal, professional, and institutional disruptions. Faculty described rapidly recording lectures, uploading materials into Canvas, and restructuring courses that had previously been delivered entirely face-to-face. Several participants noted that they began posting recorded class sessions within hours of meeting and adjusted assignment deadlines to account for student circumstances. P11 explained that due dates became “more just a guidance” rather than strict cutoffs, reflecting an increased emphasis on flexibility during the

transition. Others described redesigning large, in-person exams into smaller, distributed assessments or alternative assignments that were more feasible in a remote format.

In addition to modifying course structures, faculty rethought communication strategies to maintain connection with students who were now dispersed geographically. Participants described increasing email communication, holding virtual office hours, conducting Zoom-based class meetings, and implementing frequent student feedback mechanisms such as surveys or exit tickets to gauge understanding and well-being. A2 similarly reported encouraging leniency in attendance policies and sensitivity to students' mental health concerns during the early months of the pandemic. While the initial response was largely reactive, focused on continuity and access, the prolonged nature of the pandemic prompted many faculty members to move beyond emergency measures. Over time, participants described becoming more intentional in their course design, integrating digital tools more strategically, and retaining certain online or hybrid practices even after returning to in-person instruction. As a result, what began as rapid adaptation evolved into sustained pedagogical shifts that continued to shape instructional approaches beyond the immediate crisis.

Interviews with administrator participants revealed that multiple institutional entities, including the university's Teaching and Learning Center, campus information technology services, and college-level instructional support offices, rapidly expanded their services during the initial transition to ERT. Administrators described an immediate increase in demand for instructional design assistance, technology troubleshooting, and course redesign support. Whereas these units would typically assist a limited number of faculty members each semester, the pandemic required them to support nearly all instructors simultaneously as courses moved online. This shift created a substantial increase in requests for workshops, consultations, and

technical guidance across colleges. Several administrators emphasized that the scale and speed of this transition were unlike any previous institutional change effort.

In response to this increased demand, the Teaching and Learning Center expanded its online resource repository and offered virtual workshops focused specifically on remote pedagogy and digital tool integration. One-on-one instructional consultations were made available to faculty needing individualized assistance with course redesign or learning management system navigation. Information technology services assisted with hardware distribution, software access, and troubleshooting for both faculty and students working off campus. At the college level, leaders supplemented these centralized supports through Zoom-based town halls and frequent email communications intended to clarify expectations and provide reassurance. Administrators acknowledged that communicating evolving guidance across a large and decentralized institution posed ongoing challenges, particularly as public health recommendations and institutional policies continued to shift.

Role of Syllabi

In addition to faculty interviews, a document analysis of course syllabi offered before and after the pandemic provided further insight into changes in instructional design, course expectations, communication practices, and technology integration. Pre-pandemic syllabi, for courses taught before ERT, frequently reflected more traditional course structures, typically organized around in-person class meetings with limited reference to digital educational tools or alternative instructional modalities. In contrast, syllabi from courses taught after the transition to emergency remote teaching, beginning in the Spring 2021 semester, more commonly included clearly defined weekly modules aligned with the learning management system, explicit technology and equipment requirements, and expanded communication guidelines such as virtual

office hours and response-time expectations. Post-pandemic syllabi also reflected greater flexibility in attendance and assessment policies. Additionally, these documents more frequently included accessibility statements and references to recorded lectures or online engagement expectations. Together, these differences illustrate observable shifts in documented course structure and instructional expectations before and after the pandemic. Figure 4.3 illustrates the comparisons of pre- and post-pandemic Syllabi.

Figure 4.3

Comparison of Pre- and Post-Pandemic Syllabi Characteristics

Category	Pre-Pandemic Syllabi	Post-Pandemic Syllabi
Structure & Organization	Basic weekly outline	Fully modular weekly structure with clear navigation
Technology Expectations	Minimal tech listed	Detailed tool lists, LMS expectations, equipment requirements
Assessment	Traditional exams; fewer alternatives	Open-book exams, projects, varied assessments
Attendance/Participation	Rigid attendance rules	Flexible attendance, alternative participation options
Communication	General statements	Specific response times, virtual office hours, weekly announcements
Accessibility	Minimal or boilerplate	Expanded accessibility statements, captioning expectations

Overview of Findings

This section reports the findings from faculty interviews, administrator interviews, and document analysis of course syllabi collected before and after the COVID-19 pandemic. Findings are organized into five themes that reflect recurring patterns across participants' experiences and the instructional changes documented in course materials. Each theme is supported by illustrative excerpts from interviews using participant codes (e.g., P1 for faculty and A1 for administrators) and is supplemented by syllabus evidence when relevant. The chapter begins with Theme 1, which describes how faculty adapted their teaching practices during and after the transition to ERT, moving from rapid response and uncertainty toward more intentional redesign and sustained instructional practices. The remaining themes build from this foundation by describing changes in technology use and confidence and by identifying barriers and facilitators that influenced implementation. The final theme highlights longer-term pedagogical

shifts that participants described as continuing in post-pandemic teaching contexts. Figure 4.4 illustrates the themes and subthemes found in this study.

Figure 4.4

Study Themes and Subthemes

Theme	Subthemes
Adaptation	Initial disruption; steep learning curve; intentional redesign; sustained modular structure; increased flexibility
Growth in Technology Use, Confidence, and Self-Efficacy	Increased comfort; perceived usefulness; improved ease of use; strengthened self-efficacy; sustained technology integration
Workload, Time, and Structural Barriers to Online Course Redesign	Workload/time; unclear institutional guidance; student disengagement; unequal technology access; emotional strain
Facilitators Supporting Effective Teaching Practices	Instructional designer support; peer collaboration; timely professional development; autonomy and creative freedom
Long-Term Pedagogical Shifts and Future Directions in Higher Education	Normalization of hybrid practices; flexible policies; empathy-driven teaching; revised assessments; future institutional expectations

Theme 1: Adaptation

The first major theme that emerged from faculty interviews describes how participants adapted their teaching practices during and after the COVID-19 pandemic. Although the transition to remote instruction began with uncertainty and rapid adjustment, faculty described a gradual shift from ERT toward more intentional instructional redesign over time. Thirteen of the sixteen faculty participants indicated that the experience altered how they approached teaching, planning, and student engagement. When reflecting on their practices after returning to face-to-face or hybrid formats, a majority of participants (12 of 16) described pandemic-related adaptations as meaningful shifts rather than temporary adjustments. Collectively, these accounts illustrate an evolution in teaching practice, moving from initial disruption toward more sustained and intentional pedagogical change.

Faculty Perspective: Initial Disruption and Steep Learning Curves. “It felt like everything changed overnight,” P9, a professor in education recalled. “We were just trying to keep up and make sure students had something to work on.” Faculty consistently described the

early stages of the transition to ERT as chaotic, overwhelming, and characterized by steep learning curves. Many participants reported having limited or no prior experience teaching online and expressed feeling unprepared for the speed and scale at which courses had to be converted. The abrupt shift left little time for planning or professional development, forcing faculty to focus on immediate instructional survival rather than pedagogical refinement.

Participants described working long hours to upload materials, learn unfamiliar technologies, and redesign assessments, often while simultaneously navigating rapidly changing institutional guidance and personal stressors related to the pandemic.

“I didn’t know what I was doing at first,” P3, a teaching associate professor in Engineering explained. “I just tried to get something posted so students would have something to work on.” Several faculty recalled feeling unconfident and uncertain about how to effectively translate face-to-face teaching strategies into online environments. Similarly, P9 characterized the period as “survival mode,” noting that faculty were “just trying to stay one step ahead of the students.” Participants described struggling to adapt established instructional approaches to unfamiliar digital formats.

Despite these challenges, participants emphasized a strong sense of responsibility toward their students. Nearly all faculty participants (14 of 16) described feeling a heightened obligation to ensure continuity of learning, even when they felt uncertain about their own preparedness. Even while struggling with unfamiliar tools and instructional formats, faculty described prioritizing student access, communication, and instructional stability. As P12, a professor in arts and sciences, explained, “I knew the students were just as overwhelmed as we were. I felt like I had to make sure they didn’t fall behind because of something I couldn’t control.” Several participants described increasing the frequency of announcements, extending deadlines, or

creating alternative assignment formats to reduce confusion and maintain engagement. Others noted that they responded to emails more quickly than usual or held additional virtual office hours to provide reassurance. This commitment to supporting students served as a motivating force during the most disruptive phase of the transition and helped faculty persist despite uncertainty and fatigue.

Faculty Perspectives: Intentional Redesign and Improved Course Organization. As remote instruction continued beyond the initial emergency period during Spring 2020 and into Fall 2020, faculty described a shift from reactive, short-term adjustments toward more intentional and strategic course redesign. By Fall 2020, a majority of participants reported investing significant time and effort into reorganizing course content to improve clarity, consistency, and navigability for students. Faculty described adopting consistent weekly modules that followed a uniform structure within the learning management system. As P6, a teaching assistant professor in engineering, explained, “By fall, I had redesigned the entire course into weekly modules with videos, assignments, and announcements. It made everything clearer for students.”

Several faculty described structuring modules around the same predictable format each week, including clearly labeled readings, recorded lectures, assignments, and due dates. P8, an early career faculty member in the Education, noted, “Students knew exactly where to click and what to expect every week. That consistency reduced confusion.” In addition to structural changes, participants incorporated recorded lectures, demonstrations, and short instructional videos into these modules, allowing students to revisit content as needed. Faculty indicated that these design decisions were informed by observations of student engagement and feedback gathered during Spring 2020, when remote instruction first began.

Thirteen of the sixteen faculty participants reported that the redesigned course structures improved aspects of their teaching practice and classroom management. Several described increased efficiency, particularly in reducing repetitive student emails and clarifying assignment expectations. P12 shared, “I won’t go back to how I taught before. This format works better for everyone.” Other participants explained that consistent weekly module structures reduced confusion and decreased the need to re-explain instructions during class sessions. Some faculty noted that having clearly organized materials in the learning management system streamlined grading and communication processes. While participants did not consistently reference formal performance metrics, many described observing improved assignment completion rates and stronger student engagement following the course redesign.

Faculty Perspectives: Shift Toward Flexibility and Responsiveness. Another key element of faculty adaptation involved reconsidering long-standing assumptions about attendance, deadlines, and assessment policies. Several participants explained that prior to the pandemic, they equated physical presence in the classroom with engagement and maintained firm deadlines as a primary mechanism for promoting accountability. As P5, an associate professor in the engineering noted, “Before COVID, I believed if you weren’t in class, you weren’t engaged. That just wasn’t true once everything moved online.” Faculty described how the transition to remote instruction challenged these assumptions, particularly as they became more aware of the varied circumstances students were navigating. Participants referenced illness, caregiving responsibilities, inconsistent internet access, and mental health concerns as factors that required them to rethink traditional expectations around attendance and timeliness.

In response, faculty implemented specific adjustments to their course policies. Nine of the sixteen participants reported introducing deadline flexibility, such as 24–48 hour grace

periods or reduced penalties for late work. P11, an advanced instructor in business shared, “I changed my grading policy so late assignments lost fewer points. I realized students were dealing with things outside their control.” Others described modifying attendance policies by allowing participation through discussion boards or reflective assignments rather than requiring live presence during synchronous sessions. Several faculty also revised assessment strategies by offering alternative formats or allowing students to choose between assignment types.

For many participants, these changes did not disappear after returning to face-to-face instruction. Eight faculty members indicated that they retained some form of flexible deadline policy or alternative participation option in subsequent semesters. As P12, a professor in arts and sciences explained, “I still build in flexibility. I don’t think rigid deadlines always measure learning.” Rather than viewing flexibility as a temporary accommodation, these faculty described it as a more intentional approach to supporting student success while maintaining academic standards.

Faculty also described rethinking assessment practices in response to the constraints of remote instruction. As P5, an associate professor in engineering explained, “I realized students needed different ways to show learning. That pushed me to rethink assessments and offer more choices.” Rather than relying solely on traditional proctored exams, participants described implementing open-book assessments, project-based assignments, reflective journals, and asynchronous discussion activities. In the College of Engineering, for example, one faculty member described replacing timed exams with multi-step design projects that required students to document their problem-solving process. In contrast, faculty in the College of Arts and Sciences more frequently reported incorporating reflective writing assignments or discussion-based analyses in place of in-class exams. Several early-career faculty noted feeling more

comfortable experimenting with alternative assessments, while some senior faculty described initially hesitating before gradually adopting new formats after observing student performance and engagement. Participants often described these revised assessments as providing deeper insight into student understanding and better aligning with course objectives.

In addition to revising course policies, faculty described becoming more intentional in how they communicated with students. Several participants reported increasing the frequency of LMS announcements and holding regularly scheduled virtual office hours to maintain visibility and connection. As P10, a professor in Education, explained, “I started posting weekly announcements every Monday outlining exactly what was due and what students should focus on. That cut down on confusion.” Other faculty described providing more detailed written feedback on assignments or recording short video responses to clarify expectations and encourage engagement. P14, an assistant professor in business noted, “I realized students needed more reassurance online, so I made it a point to respond quickly and give more thorough comments.”

These communication shifts were also visible in post-pandemic syllabi. In five of the eight matched syllabi, faculty explicitly outlined response-time expectations, such as “Emails will be answered within 24 hours on weekdays,” and included scheduled virtual office hour blocks conducted via Zoom. One syllabus went from just having set office hours, to having set office hours as well as promoting an open-door policy to students. Six of the syllabi added structured weekly communication statements, including language such as “Students should review the weekly announcement before beginning course activities.” Compared to pre-pandemic documents, post-pandemic syllabi more frequently specified preferred communication

channels and detailed how students could access support. These documented changes align with faculty descriptions of increased intentionality in communication practices.

Faculty Perspectives: Sustained Pedagogical Changes After the Return to Campus.

Nearly all participants emphasized that the instructional adaptations made during periods of remote teaching resulted in long-lasting changes to their courses, even after returning post-pandemic teaching in the Spring of 2021. Faculty consistently reported continuing to use strategies first adopted during the pandemic. These strategies included the use of weekly module-based course structures and more detailed assignment instructions and rubrics. Faculty also described incorporating recorded lectures or supplemental videos, offering greater flexibility with deadlines, and increasing communication touchpoints with students. These practices were described as enhancing transparency and improving overall course effectiveness.

Rather than viewing online and hybrid tools as temporary emergency measures, faculty increasingly described them as instructional enhancements that complemented face-to-face teaching. Several participants explained that their experience during the pandemic expanded their understanding of how technology and flexibility could be used more intentionally to structure courses and support student learning. As P14 stated, “I used to think online tools were just backups. Now I build my course assuming students will use the modules, videos, and announcements as part of the regular learning process.” Other faculty described continuing to organize face-to-face courses within the learning management system and maintaining flexible participation options introduced during remote instruction. P14 added, “The pandemic forced me to rethink everything, and I honestly became a better teacher because of it.” These reflections indicate that faculty viewed the instructional adjustments made during the pandemic as ongoing components of their teaching practice rather than temporary accommodations.

Administrator Perspectives: Institutional Conditions Shaping Early Adaptation.

Administrators described the initial transition to ERT as requiring rapid and simultaneous decision-making across multiple areas of the institution. A1, who oversaw academic operations, explained, “We were making decisions day by day, sometimes hour by hour. There wasn’t a playbook for this.” A3 emphasized the complexity of coordinating instructional continuity while also addressing technology infrastructure and student support needs, noting that “everything had to move at once, faculty support, Canvas access, Zoom licenses, policies.” Several administrators described working with incomplete information as public health guidance evolved. A4 reflected, “We didn’t always know what the next week would look like, but we still had to provide direction.” While all administrators referenced time pressure, they differed in what they identified as the most pressing concern, with some focusing on technology access and others emphasizing policy interpretation or communication challenges.

Several administrators emphasized that while faculty were working to redesign courses at the instructional level, institutional leaders were concurrently building processes and systems that had not previously existed at scale. A1, a 20-year employee serving in information technology leadership, explained that the early weeks of the transition required rapid expansion of infrastructure to support fully remote instruction. “We were making decisions day by day,” A1 recalled, referring to the need to increase Zoom licensing capacity, ensure remote VPN access, and scale server bandwidth to accommodate significantly higher LMS traffic. A1 described monitoring system stability and troubleshooting connectivity issues in real time as usage spiked across campus. In contrast, A2, who served in an academic leadership role within a college, focused on policy interpretation and faculty guidance. A2 described working through questions related to attendance flexibility and grading expectations, explaining that “faculty needed clarity,

but we also had to allow room for different instructional realities.” While both administrators experienced urgency, their responsibilities differed substantially, with technology leaders addressing infrastructure capacity and academic leaders navigating instructional policy adjustments.

Administrators described the complexity of aligning instructional policies with rapidly changing external guidance. A2, a college-level academic leader, explained that federal and state public health recommendations often shifted within days, requiring rapid adjustment to instructional plans. “On Monday we were told to prepare for limited in-person capacity,” A2 noted, “and by midweek we were revising plans for fully remote delivery.” In response, A2 described communicating updated expectations to approximately 30 faculty members within the college and ensuring that revised attendance and grading guidance was implemented consistently. A4, who oversaw academic compliance, emphasized the difficulty of interpreting accreditation and accessibility requirements in a remote context, stating, “We had to make sure courses still met accreditation standards even though delivery looked completely different.” Several administrators also referenced communication challenges, explaining that evolving policies required repeated campus-wide messaging to reduce confusion and ensure alignment.

Administrator Perspectives: Establishing Early Instructional Expectations.

Administrator described setting clearer instructional expectations during the initial transition to remote instruction and in the semesters immediately following. A1, a 20-year information technology administrator responsible for campus instructional systems, explained that one immediate expectation during Spring and Fall 2020 was that all instructors actively use the learning management system to communicate with students and distribute course materials. According to A1, this meant that each course was required to maintain an updated Canvas site

that included the syllabus, assignments, announcements, and essential instructional materials.

“We needed every course to have a functioning Canvas presence,” A1 noted, “because students had to know where to find information if we shifted modalities again.” Academic administrators similarly described encouraging faculty to standardize course communication practices so students could access materials consistently, regardless of delivery format. These expectations emerged as part of the institution’s effort to stabilize instruction during ongoing uncertainty rather than as long-term policy mandates.

In addition to technology adoption, administrators described observing changes in how faculty organized courses and communicated with students during and immediately after the ERT period. A2, a college-level academic leader responsible for overseeing approximately 30 faculty members, noted that several instructors who adopted module-based course structures and recorded lectures during Spring and Fall 2020 continued using those formats upon returning to in-person instruction. A3, who served in a dean-level academic role, described reviewing course shells and observing that many instructors retained structured weekly modules with clearly labeled assignments and posted announcements. Both administrators referenced “flexible communication practices” as including more frequent LMS announcements, clearly stated email response-time policies, and scheduled virtual office hours that remained available even after returning to campus.

Administrators described noticing these changes through routine course reviews, faculty reporting, and student feedback. A2 explained that during departmental meetings, faculty frequently referenced reduced confusion and fewer student complaints related to assignment expectations. A3 noted that student exit surveys and mid-semester feedback more frequently referenced clarity of course organization and accessibility of materials compared to prior years.

While administrators did not attribute these observations to formal performance metrics alone, they described seeing fewer escalated concerns related to missed assignments and communication breakdowns. Rather than characterizing these changes as institutional mandates, administrators described them as instructional adjustments that faculty chose to maintain after recognizing their practical benefits.

Administrators described observing changes in faculty confidence and instructional decision-making in the semesters following the initial transition to ERT. A2, who oversees faculty within a single college, explained that by the second semester of remote or hybrid instruction, faculty were asking more nuanced questions about course design rather than basic technical troubleshooting. Instead of requesting help with logging into Zoom or posting materials in Canvas, faculty were seeking feedback on organizing modules, improving student engagement, and refining online assessments. A3 similarly noted that faculty who had previously expressed hesitation about instructional technology were volunteering to share course structures or demonstrate tools during department meetings by Fall 2020 and Spring 2021.

When describing “sustained” changes, administrators referenced practices that continued for at least two to three subsequent semesters after the initial emergency transition. For example, A1 observed that faculty who began recording lectures during Spring 2020 continued doing so into the following academic year, even when courses returned to in-person delivery.

Administrators did not describe these shifts as formal policy mandates, rather, they noted that faculty independently maintained certain instructional strategies after recognizing their usefulness. Their observations were based on course reviews, faculty reporting in meetings, and student feedback rather than institution-wide performance metrics. Administrators framed these

developments as evidence that faculty instructional practices had stabilized and matured after the initial emergency phase.

Syllabi Analysis. A comparison of pre- and post-pandemic syllabi revealed substantive changes in course design, policies, and instructional expectations across most courses examined. Post-pandemic syllabi demonstrated a more structured, LMS-centered organization, expanded policy language addressing flexibility and illness, and clearer articulation of expectations for online and hybrid participation. These documented shifts suggest that adaptations initially implemented during ERT were not entirely temporary but instead became embedded components of formal course design.

In terms of course design, post-pandemic syllabi more frequently included modular weekly structures, explicit references to Canvas as the central course platform, and detailed explanations of asynchronous and synchronous instructional components. Pre-pandemic syllabi often listed topics and assignment due dates with limited explanation of delivery methods, whereas post-pandemic documents described recorded lectures, Zoom sessions, online discussion boards, and digital submission procedures. In three of the post-pandemic syllabi reviewed, instructors also retained the option for students to join class sessions synchronously through Zoom even when courses were scheduled for in-person delivery. These provisions allowed students to participate remotely in situations involving illness, travel, or other circumstances that prevented physical attendance, illustrating how hybrid participation options persisted beyond the initial emergency period. Policy language also expanded. Attendance and illness policies were revised to account for remote participation and health-related absences, and 4 of the syllabi introduced explicit statements regarding technology requirements and digital access. Instructional expectations were similarly clarified. Post-pandemic syllabi provided more

detailed guidance regarding online participation, discussion engagement, academic integrity in digital contexts, and assessment formats. In several cases, assessment structures shifted from reliance on a small number of high-stakes exams to more frequent, lower-stakes assignments, reflecting recalibrated evaluation strategies aligned with online or hybrid delivery. Collectively, these changes indicate that many instructional adaptations were formalized rather than reversed once emergency conditions subsided.

Post-pandemic syllabi demonstrated a clearer and more orderly weekly organization compared to their pre-pandemic counterparts. Whereas many pre-pandemic syllabi primarily listed course topics and major assignment due dates in a chronological schedule, post-pandemic syllabi more frequently organized content into clearly labeled weekly or modular sections. These sections typically included headings such as “Week 3 Module” or “Unit 5,” followed by detailed subsections outlining required readings, recorded lectures or instructional videos, discussion activities, assignments, and specific due dates. For example, in the post-pandemic version of Geography (Fall 2022), each week was organized into a Canvas module that explicitly listed readings, lecture materials, discussion board prompts, and assignment submission links. This level of structured organization was less explicit in the pre-pandemic syllabus for the same course, which primarily provided a topical outline and general assignment deadlines.

Post-pandemic syllabi also included more explicit language regarding technology expectations and digital submission procedures. All of the syllabi clearly stated that Canvas was the official platform for accessing course materials and submitting assignments. Others outlined requirements for accessing recorded lectures, participating in Zoom sessions, or maintaining reliable internet connectivity. These documented changes reflect the normalization of LMS-

centered course management across modalities and align with administrator observations that Canvas use and digital submission protocols became institutional expectations rather than optional instructional choices.

The analysis revealed expanded flexibility and procedural specificity in assessment and communication practices when pre- and post-pandemic documents were compared. In several pre-pandemic syllabi, assessment descriptions were limited to concise listings of major graded components (e.g., midterm examinations, final examinations, or required papers), with minimal explanation of format, modality, or submission procedures. For example, one pre-pandemic humanities syllabus allocated a majority of the course grade to a series of examinations and briefly referenced quizzes and written assignments without describing how assessments would be administered or submitted. In contrast, post-pandemic syllabi more frequently described alternative or distributed assessment models. One post-pandemic computer science syllabus outlined a grading structure that included examinations, programming labs, preparatory assignments, and iterative projects, accompanied by explanations of automated grading processes and platform-based submission monitoring. Another post-pandemic computer science syllabus specified project-based builds evaluated using criterion-based rubrics and peer review adjustments. These expanded descriptions indicate not only diversification of assessment formats but increased transparency in how student learning would be demonstrated and evaluated.

Communication expectations were similarly more explicit in post-pandemic documents. In the pre-pandemic syllabi reviewed, communication language was typically brief and framed in general terms. All syllabi included statements encouraging “professional conduct” or “participation in class discussion,” but did not provide detailed guidance about how participation would occur or how instructors would communicate with students. By contrast, six of the post-

pandemic syllabi examined included clearly defined participation and communication protocols. For example, one course outlined structured online discussion requirements that specified an initial post to a prompt by a stated deadline, followed by required responses to peers. Other post-pandemic syllabi identified preferred communication channels (such as a centralized course email address or designated discussion platform), clarified expected instructor response timeframes within a certain number of business hours, and distinguished between synchronous and asynchronous office hour formats.

Expanded accessibility and student support language was also more consistently present in post-pandemic syllabi. While pre-pandemic documents generally included standard accommodation statements, later versions more frequently incorporated detailed information about disability services, mental health resources, and academic integrity expectations related to emerging technologies. Across disciplines, these differences reflect a clear shift toward greater specificity, transparency, and formalization in how communication expectations and support structures were presented to students. The documents themselves demonstrate the organizational and structural changes described by faculty and administrators in interviews, providing concrete evidence that pandemic-era instructional adjustments resulted in sustained modifications to course design.

Theme 2: Growth in Technology Use, Confidence, and Teaching Self-Efficacy

The second major theme reflects the substantial growth faculty experienced in both their use of instructional technologies and their confidence in designing and delivering online or hybrid instruction. Although most participants described encountering steep learning curves at the beginning of the COVID-19 pandemic, these early challenges ultimately led to increased comfort, proficiency, and teaching self-efficacy. Faculty described moving from uncertainty and

avoidance of digital tools to intentional and confident use of technology to support student learning. This growth emerged through repeated use of instructional technologies, hands-on experimentation, observation of peers, and targeted instructional support provided by the institution. Over time, faculty perceptions shifted from viewing technology as an external requirement to seeing it as an integrated and valuable component of effective teaching practice.

Faculty Perspectives: Increased Familiarity and Comfort with Technology.

Across the ranks and disciplines, faculty described entering the pandemic with uneven and, in many cases, limited use of instructional technology. Several mid- to late-career participants shared that prior to 2020 their courses were primarily lecture-based and delivered in person, with the learning management system used mainly for posting syllabi, announcements, or grades. A smaller number of faculty, including some early-career instructors, reported moderate use of LMS tools but limited experience with video conferencing platforms or digital assessment systems. As instructional delivery shifted online, faculty were required to rely consistently on tools such as Zoom, Canvas, Canvas Studio, discussion boards, and electronic assessment platforms. While the initial transition is discussed in Theme 1 as a steep learning curve, participants in this theme emphasized what followed: repeated use led to familiarity, and familiarity gradually led to confidence. Faculty described a progression from viewing technology as something unfamiliar or peripheral to seeing it as a normal part of course design. What had once required significant effort became routine. As digital tools became embedded in their day-to-day teaching practices, faculty reported greater comfort navigating platforms, experimenting with new features, and troubleshooting minor issues independently. This increased familiarity reduced the cognitive load associated with managing technology and allowed faculty to focus more intentionally on instructional decisions rather than mechanics. Over time, technology was

no longer described as something they had to “figure out,” but as something integrated into how they teach.

Participants described a clear trajectory from discomfort to competence as they became more comfortable navigating digital platforms and experimenting with new features. For example, P2, a mid-career faculty member in education, reflected on how dramatically their approach had changed, stating, “I used to avoid technology whenever possible. Now I feel comfortable using Zoom, recording videos, and setting up modules. It’s become part of how I teach.” Similarly, P8, a faculty member in the education who had previously relied heavily on face-to-face instruction, described discovering capabilities within the learning management system that had gone unused prior to the pandemic: “Once I learned what Canvas could actually do, it opened up a lot of possibilities for organizing content and communicating with students.” These reflections were not isolated. Across interviews, several faculty members described gaining confidence not only in using specific tools but also in troubleshooting minor technical issues independently and designing instructional materials intentionally for digital environments. Participants noted that as their familiarity increased, they were less preoccupied with navigating platforms and more able to focus on instructional structure and student engagement. This shift from managing technology to leveraging it for pedagogical purposes marked a meaningful change in how faculty experienced their teaching practice.

Faculty Perceptions: Growing Perceptions of Technology’s Usefulness. As faculty became more familiar with educational technologies, many described a shift not simply in how often they used these tools, but in how they evaluated their usefulness. Whereas earlier technology adoption during ERT was framed as necessary for maintaining instructional continuity, participants in this phase reflected on how their perceptions had changed over time.

Rather than viewing digital tools as temporary accommodations, faculty increasingly described them as practical supports that improved course organization, clarified expectations, and enhanced communication. This shift represented more than flexibility in delivery. It reflected a reconsideration of technology's role in effective teaching practice.

Several faculty emphasized that recorded lectures and asynchronous materials improved student access to content and reduced repetitive explanations. P10, an education professor in a lecture-based course, explained, "I realized technology could actually make things easier. Students could rewatch videos, and I didn't have to repeat explanations five times." Participants also noted that consistent course organization within the LMS helped students navigate expectations more easily, leading to fewer questions and less confusion. These reflections provide interview-based evidence that faculty perceived improvements in communication clarity and transparency because of structured digital tools. In addition to supporting student learning, faculty recognized the ways technology streamlined their own instructional workflows. P7, late career instructor in arts and sciences who had initially been hesitant about digital tools, commented, "Once I set up the structure in Canvas, it saved me time each semester. Everything was organized in a way that made sense." Over time, these experiences contributed to a broader shift in mindset, with faculty increasingly viewing technology not as an added burden but as an efficient and sustainable component of student-centered course design.

Faculty Perspectives: Developing Teaching Self-Efficacy Through Practice and Support. As described in Chapter 2, teaching self-efficacy in this study refers to faculty members perceived confidence in their ability to design, deliver, and adapt instruction effectively across modalities. Within this framework, many participants described a noticeable increase in their sense of instructional competence following sustained engagement with digital tools. Rather

than simply reporting improved technical skill, faculty reflected on increased confidence in structuring courses, troubleshooting challenges, and making instructional decisions in online or hybrid contexts. This growth was frequently attributed to mastery experiences or gaining confidence through repeated practice and observing successful outcomes in their own courses. Participants described learning through trial and error, gradually refining their approaches as they saw what worked. P4, a late-career Professor, reflected this progression: “The more I used the tools, the more confident I became. At first, everything felt overwhelming, but now I know I can create a fully online course if I need to.”

While most faculty described increased confidence over time, not all participants framed the experience as entirely positive. A small number acknowledged that they continued to prefer in-person teaching or found certain technologies frustrating; however, even these faculty members noted improved competence compared to the early stages of the pandemic. Overall, participants reported greater assurance in designing digital materials, organizing course content within online platforms, and assessing student learning in hybrid or online formats.

Faculty consistently identified institutional and peer support as central to this development. Instructional designers and campus-based training opportunities were frequently described as especially helpful. P11, a faculty member who had initially felt uncertain about online design, noted, “The instructional designers showed me how to break things down. That made me feel like I could handle anything that came up later.” In addition to formal training, faculty described learning from colleagues through shared course templates, demonstrations of how others structured LMS modules, and informal conversations about what strategies were effective. These support systems helped normalize experimentation, reduced anxiety associated with technology use, and reinforced faculty members’ belief in their ability to manage future

instructional challenges. Over time, this growth in perceived capability became less about mastering specific tools and more about confidence in adapting instructional practices as needed.

Faculty Perspectives: Sustained Integration of Technology into Teaching. Faculty emphasized that the growth in technology proficiency and confidence experienced during the pandemic did not disappear once courses returned to post-emergency instruction. Rather than describing these tools as temporary solutions, participants framed them as ongoing components of their teaching practice. Several faculty reported continuing to record short lecture videos, use Canvas modules to organize content, offer virtual office hours, and maintain multiple communication channels even after returning to campus. These practices were described as intentional decisions rather than emergency measures. P15, a professor of practice in Business, teaching in a hybrid format, explained, “I still use videos and virtual office hours even though we’re back on campus. Students appreciate having options.” For these participants, technology was no longer something added during a crisis. It had become embedded within routine course design.

Faculty also described using LMS analytics to monitor student engagement and inform instructional decisions. Several participants explained that reviewing course access data allowed them to identify students who had not viewed materials, submitted assignments, or participated in discussions, prompting earlier outreach. One faculty member described checking analytics to see whether students were watching recorded lectures before class, which helped determine whether additional clarification was needed. Others noted that tracking quiz attempts or assignment submission patterns allowed them to adjust pacing or revisit challenging concepts. These examples demonstrate that technology integration extended beyond convenience; faculty were using digital data intentionally to support student progress and refine their instruction.

Administrator Perspectives: Technology Adoption as Forced Master.

Administrator interviews provided a distinct perspective on faculty growth in instructional technology, framing it less as gradual development and more as forced mastery under compressed timelines. A3, a college-level academic administrator responsible for overseeing faculty instruction, described the early weeks of ERT as “an all-hands-on-deck situation” in which entire departments had to move online within days. Faculty who had previously relied exclusively on in-person teaching were suddenly expected to build functional Canvas courses, conduct Zoom sessions and digitize assignments with little preparation. As A3 explained, “We had to actually train people on something right now. There wasn’t a slow rollout. It was immediate.” From this vantage point, technology adoption was not optional or incremental; it was an institutional requirement tied directly to instructional continuity.

A1, a long serving administrator in campus information technology, described the transition from a different operational perspective. He recalled receiving reports from departments where faculty had not activated their Canvas courses, resulting in students emailing deans because they could not access readings or submit assignments. In some cases, faculty initially attempted to replicate paper-based workflows by asking students to print worksheets, complete them by hand, and scan them back, only to realize that many students did not have access to printers or scanners in their apartments. A1 noted that these situations required rapid troubleshooting and individualized support, explaining that “we were solving problems in real time that normally would have taken months of planning.” Similarly, A2 and A4 described observing faculty who had previously resisted digital tools becoming proficient out of necessity. Although their institutional roles differed, ranging from technology oversight to college

leadership, they consistently described the pandemic as accelerating years of gradual technology adoption into a matter of weeks.

A2 acknowledged that some faculty initially resisted the sudden reliance on instructional technologies but emphasized that the circumstances left little room for avoidance. From A2's perspective as a college-level administrator, repeated use was what ultimately changed faculty comfort levels. A2 explained that faculty who had previously limited their use of Canvas were suddenly logging in daily, building modules, posting announcements, and troubleshooting issues in real time. As A2 described it, "Once they had to use it every day, it stopped being optional and just became part of the job." A2 noted that over time, faculty began commenting on how the platform helped organize materials, streamline communication, and make expectations clearer for students. Rather than framing this shift as voluntary innovation, A2 described it as growth that occurred because "there wasn't another way to run their classes."

Administrator Perspectives: Observations on Self-Efficacy. Administrators also described growth in faculty teaching self-efficacy that extended beyond technical proficiency. They noted increased confidence in problem-solving and instructional decision-making, particularly in situations that required quick adjustments. Rather than viewing self-efficacy as simply mastering specific tools, administrators emphasized that confidence developed through successfully navigating unfamiliar and complex challenges during the pandemic. A4, a senior academic administrator responsible for overseeing multiple programs within the college, pointed to increased institutional resilience as a lasting outcome, observing that faculty approached later disruptions, such as weather-related closures or cyber incidents, with greater confidence because, as one administrator noted, "we did it before." Together, these experiences contributed to a broader sense of preparedness and adaptability across the faculty.

Administrator observations closely aligned with faculty narratives describing increased confidence in their ability to design, manage, and adapt instruction across modalities.

Administrators noted that faculty were more willing to experiment with new tools, modify course delivery methods, and respond flexibly to unexpected challenges after the pandemic. This increased self-efficacy was evident not only in online or hybrid teaching contexts but also in how faculty approached instructional planning more generally. Together, administrator perspectives reinforce faculty accounts of sustained growth in confidence and adaptability, highlighting how crisis-driven experiences contributed to long-term instructional resilience and capacity-building at both the individual and institutional levels.

Syllabi Analysis. A review of pre- and post-pandemic syllabi revealed clear changes in how instructional technology was referenced and positioned within course expectations. Several pre-pandemic syllabi referenced the LMS only briefly. For example, a Fall 2019 music course syllabus stated simply that “Canvas will be used for course announcements and grade posting,” with no additional explanation of required digital engagement. Similarly, a Spring 2019 computer science syllabus listed exam dates and project due dates but did not specify electronic submission procedures or structured LMS-based interaction. In these pre-pandemic documents, technology was typically described as a supplemental communication tool rather than a central component of instructional delivery.

In contrast, post-pandemic syllabi positioned technology as an expected and integral element of course participation. A Fall 2025 computer science syllabus specified that “all assignments must be submitted electronically through Canvas” and detailed the use of Codio for automated programming assessments. A Spring 2025 syllabus in the same discipline outlined structured online labs, digital submission requirements, and monitoring tools embedded within

the platform. Another post-pandemic syllabus required participation in discussion boards with clearly defined expectations for initial posts and peer responses, along with instructions for accessing recorded lectures and supplemental multimedia materials. These documents included explicit guidance on accessing Zoom links, navigating LMS modules, and engaging with asynchronous content. Unlike the brief references in pre-pandemic syllabi, post-pandemic documents provided detailed procedural instructions for digital engagement.

Post-pandemic syllabi also demonstrated expanded articulation of technology requirements. Several documents listed required hardware, software, and internet access expectations directly within the syllabus, along with instructions for troubleshooting and accessing technical support. In some cases, syllabi included statements such as “students are responsible for ensuring reliable internet access for synchronous sessions” and provided links to institutional support services. These types of specifications were largely absent in pre-pandemic syllabi. Together, these documentary contrasts show a shift from minimal reference to technology toward explicit integration of digital platforms as routine components of course design.

Theme 3: Workload, Time, and Structural Barriers to Online Course Redesign

While faculty demonstrated considerable adaptability and growth in their online and hybrid teaching practices, they also described the significant workload, time demands, and structural constraints that shaped the transition to ERT and its aftermath. These factors influenced how quickly and effectively faculty were able to redesign courses, incorporate new technologies, and adjust instructional strategies. Participants emphasized that adaptation did not occur under ideal conditions, but alongside increased teaching responsibilities, shifting institutional expectations, and ongoing uncertainty. Although the nature and intensity of these

barriers varied across disciplines and roles, faculty consistently pointed to expanded workload, compressed timelines, communication challenges, and uneven student access as central constraints. The emotional strain of teaching during a prolonged period of disruption further affected the pace and sustainability of course redesign efforts.

Faculty Perspectives: Heaving Workload and Time Constraints. The most frequently cited barrier across participants was the substantial increase in workload associated with converting courses for online or hybrid delivery. Faculty described the redesign process as significantly more time-intensive than anticipated, particularly during the early months of the pandemic when they were modifying assessments, recording lectures, and restructuring course materials. Several participants quantified this increase. P9, a 20 year faculty member teaching in a professional program, stated, “The workload tripled. It wasn’t just moving things online. It was recreating the course.” P9 estimated spending entire weekends recording lectures and rewriting assignments that previously required minimal preparation for in-person delivery. Similarly, P14, a faculty member in a laboratory-based discipline, explained that “every week felt like creating a brand-new course from scratch,” noting that demonstrations and explanations that once occurred naturally during lab time now required recorded demonstrations, written guides, and detailed preparation in advance.

Faculty emphasized that online teaching required more than simply transferring existing content to a digital format. P5, an associate professor in engineering, described how much of their in-person teaching relied on what they called being “a whiteboard type guy,” where they could “just kind of do the whiteboard” and respond to questions as they arose. Once courses moved online, that approach no longer functioned in the same way. P5 explained that it required figuring out how to make writing visible on camera and creating more structured materials to

replace the informal, in-the-moment explanation that had previously worked in person. He noted feeling “obligated to make a lot more visuals... like PowerPoint,” because his usual style depended on being physically present and reading student reactions. This shift required anticipating questions in advance and formalizing explanations that would previously have unfolded spontaneously, significantly increasing upfront preparation time. While some participants indicated that preparation became more efficient in later semesters once materials were built, most reported that online and hybrid formats continued to demand more sustained time than traditional face-to-face teaching.

Faculty also identified several ongoing contributors to workload beyond the initial redesign phase. Increased student communication was frequently mentioned, with participants describing higher volumes of email and LMS messages as students sought clarification outside scheduled class time. Others pointed to frequent content updates as policies and instructional modalities shifted across semesters. The management of digital assessments required configuring quiz settings, monitoring submissions, addressing technical issues, and responding to academic integrity concerns in ways that did not exist in the same form during face-to-face instruction. These responsibilities illustrate that the time demands were not confined to the early weeks of ERT but persisted as faculty continued refining post-emergency online and hybrid course delivery.

Faculty Perspectives: Lack of Clear or Consistent Institutional Direction. Faculty also identified unclear or inconsistent institutional communication as a significant barrier during the transition to remote instruction. Participants described difficulty navigating frequently changing policies related to course delivery formats, attendance expectations, safety protocols, and technology requirements. For example, several faculty explained that guidance shifted

between requiring synchronous Zoom sessions and encouraging asynchronous delivery, forcing them to revise participation structures mid-semester. Others described uncertainty about how strictly to enforce attendance when students reported illness, quarantine, or technology limitations. Safety protocols regarding classroom capacity and physical distancing were also adjusted multiple times, leading some faculty to redesign seating charts or alternate between in-person and remote sessions. In addition, changes in recommended technology platforms or expectations for LMS usage required faculty to reconfigure course sites after instruction had already begun.

P1, a faculty member teaching a multi-section undergraduate course, described this experience directly, stating, “The rules kept changing. One week we were supposed to meet on Zoom, the next week we were told to do asynchronous.” Similarly, P7, who teaches psychology, explained, “There wasn’t a unified message. We were all trying to interpret what we were supposed to do.” Both participants noted that this uncertainty required additional time spent revising course plans and clarifying expectations for students.

Faculty Perspectives: Challenges With Student Engagement and Communication.

Another major barrier identified by faculty involved maintaining meaningful student engagement in online and hybrid learning environments. P6, a faculty member teaching a discussion-based undergraduate course, described the early transition to remote instruction as “teaching into a void,” explaining that during synchronous Zoom sessions many students kept cameras off and rarely spoke unless directly prompted. Without facial expressions, informal conversation before class, or spontaneous questions, P6 noted that it became difficult to determine whether students understood the material or were simply logged in. Similarly, P12, who taught a course with frequent written assignments, observed noticeable changes in communication patterns, stating,

“Some students just stopped emailing altogether. It was hard to know who was struggling.” In that course, P12 described irregular submission patterns, with some students turning in work consistently while others disappeared for extended periods before re-engaging.

Faculty explained that these engagement concerns were visible in concrete ways, including missed assignments, incomplete discussion posts, declining quiz performance, and reduced attendance in synchronous sessions. Several participants described reviewing LMS activity reports to determine whether students were logging in or accessing materials, using those analytics as one of the few indicators of engagement available in fully online formats. Participants frequently connected these patterns to external stressors such as illness, caregiving responsibilities, employment disruptions, and mental health challenges, all of which were heightened during the pandemic.

These engagement challenges required additional faculty effort. For example, P15, who teaches asynchronous online courses in digital and social media, described intentionally building “one to two virtual check in sessions” into each course. Although attendance could not be required, P15 used Zoom sessions to “make connections to the material” and “make connections to the students”. P15 also emphasized proactive communication, explaining, “I try to reinforce that, you know, I'm here to support you. You're not alone. I'm sending you reminders... like use my Calendly link... to set up a meeting with me anytime”. P15 noted that these structured check-ins emerged during the pandemic but were retained because they helped students feel connected and supported, even in asynchronous environments. Other faculty similarly described extending deadlines, recording supplemental explanation videos, and redesigning participation requirements to allow asynchronous options when students could not attend live sessions. While

these strategies helped maintain connection, faculty emphasized that they required sustained time and emotional energy, further intensifying workload during an already demanding period.

Faculty Perspectives: Unequal Access to Technology and Resources. Unequal access to technology emerged as a persistent barrier for both students and faculty, particularly during the initial transition to remote instruction. P5, a faculty member teaching in a discipline that traditionally relies on hands-on and equipment-based instruction, described beginning the semester without even having a personal webcam, explaining, “I didn’t have a webcam at first, and students didn’t always have laptops or Wi-Fi. We were all working with different levels of access.” In courses that normally depended on lab space, physical materials, or in-class demonstrations, the lack of reliable devices and internet connectivity created immediate instructional constraints. Faculty described students living in rural areas struggling with unstable internet connections that made synchronous Zoom participation difficult, while others attempted to complete coursework using only smartphones. These disparities required modifications such as recording live sessions, reducing file-size requirements, offering alternative low-bandwidth assignments, and redesigning hands-on activities into simulations, recorded demonstrations, or written analyses.

Differences in faculty access and personal circumstances further shaped the transition. Some participants reported having established home offices with strong broadband and multiple monitors, while others were sharing space with family members or working in areas with inconsistent connectivity. P6 described being required to quarantine in a hotel room for approximately six weeks at the onset of the pandemic. She explained, “So I was, like, in the hotel room with all my family, with my four kids, with my husband. We were all in the same room.” During that time, she noted, “I had to teach online while I’ve been with five other people in a

very, very small place where you cannot leave,” and emphasized that it was “really, really hard... to do your work in a quiet place.” P6, an engineering faculty member, further reflected that being “locked in a place... will affect your mental health... your desire to continue teaching online.” This experience illustrates how environmental instability and personal circumstances intersected with instructional demands. Less experienced faculty, particularly those who had relied heavily on in-person instruction, described steeper barriers related to unfamiliar hardware and software. Participants emphasized that although flexibility allowed instruction to continue, unequal access required additional troubleshooting, extended deadlines, individualized accommodations, and repeated adjustments. These structural inequities did not prevent adaptation, but they significantly increased the time and cognitive demands associated with course redesign and delivery.

Faculty Perspectives: Emotional and Cognitive Overload. Although less frequently discussed than logistical barriers, emotional fatigue and cognitive overload were described by multiple participants, including P3, P6, and P9, during the transition to online teaching. Faculty reported managing the dual responsibilities of redesigning courses while simultaneously supporting students who were experiencing heightened stress. This combination of instructional redesign, increased communication demands, and emotional labor contributed to sustained exhaustion. P3 reflected on this experience, stating, “It was exhausting trying to be flexible, redesign content, answer nonstop emails, and keep students motivated.” Similarly, P9 described

The mental strain associated with continuous course redevelopment, explaining that the workload “tripled” and required sustained effort week after week. These accounts illustrate that emotional strain was intertwined with pedagogical demands rather than separate from them.

P6's experience further underscores how personal and environmental stressors intensified cognitive overload. She described being "locked in a place... [that] will affect your mental health... your desire to continue teaching online," and noted that during that time she was unable to give students "100% fully attention." Participants emphasized that during peak periods of uncertainty, instructional decisions were often driven by necessity rather than innovation or long-term planning. Several described operating in a form of "survival mode," prioritizing continuity and responsiveness over creative course design. While many eventually adapted and regained a sense of control, the cumulative emotional toll of teaching during a prolonged crisis shaped both the pace and scope of instructional change.

Administrator Perspectives: Structural and Policy Constraints. Administrator interviews provided structural context for many of the barriers faculty described. Administrators characterized the transition as a period of rapid decision-making under significant uncertainty. As A3, an administrator in Student Services explained, "You can never be fully prepared... you have to be dynamic in the moment... we're going to make decisions based on the information we have", noting that they "didn't always have a way to predict what the next step was going to be". This uncertainty shaped institutional guidance, which was intentionally flexible but not always specific. Reflecting on lessons learned, A3 stated, "We need to be more articulate and more specific... when we had gray areas in between... you left a little bit too much room for how others are going to interpolate that and take it their own direction... sometimes we just need to be black and white". While flexibility was designed to accommodate diverse instructional contexts, administrators recognized that ambiguous policies sometimes transferred interpretive responsibility to faculty already managing increased workload demands.

Administrators also acknowledged communication and policy-level constraints that complicated faculty adaptation. A3 noted that although “support and communication was coming out regularly,” faculty “did have to know which web pages were being updated and... seek some of it out,” and “it was hard to keep up with that flow of information”. In response to early inconsistencies, institutional leaders later tightened certain processes to provide greater stability. As A5, a mid-career college dean explained, once course schedules were published, modality decisions became binding because “once you list that schedule you lock in the modality and that’s the policy part of it”. A5 further emphasized that “you cannot just willy nilly switch the modality... that is the contract you have with the university and with the students”. These reflections illustrate how administrators attempted to balance flexibility, clarity, and system-level accountability as the institution moved beyond the initial emergency phase.

Administrator Perspectives: Technology and Access Assumptions.

Administrators acknowledged that early institutional responses to the pandemic were shaped by assumptions about uniform access to technology that later proved inaccurate. A1, who served in a technology administrative role during the transition, explained that initial planning operated under the assumption that “all students had good access to technology,” which quickly proved untrue. As remote instruction continued, disparities became more visible. Administrators observed that some students lacked personal laptops, relied on unstable rural broadband connections, or attempted to complete coursework using shared devices within households. Faculty similarly reported varying levels of home infrastructure, including limited webcam access and inconsistent connectivity. A1 noted that the institution did not initially have devices available to distribute at the departmental level, which required units to respond reactively as needs surfaced.

Other administrators described how access disparities unfolded differently across units. A3 reflected that communication about available resources was often centralized but required faculty to actively seek updated information, noting that “you did have to know which web pages were being updated and... seek some of it out”. In departments with higher proportions of rural students or students balancing caregiving responsibilities, access challenges were particularly pronounced. A5 described how institutional policy adjustments later addressed modality stability and planning timelines to better support students who needed to anticipate online access needs in advance. These adjustments were coordinated at the Provost’s Office level, often in consultation with the Registrar and college leadership, to ensure that once course modalities were listed, they could not be changed without significant justification.

Syllabi Analysis. Document analysis of the paired pre- and post-pandemic syllabi revealed clear shifts in policy language and assessment structure rather than simple reductions in detail. The most consistent change involved attendance and participation policies moving from fixed expectations to conditional or flexible language. For example, the pre-pandemic Music (Spring 2019) syllabus required in-person participation and concert attendance without reference to alternative modalities. In contrast, the post-pandemic Music (Spring 2021) version stated, “Current plans are to offer this course in a face-to-face modality, although the lectures will be captured on Zoom and the sessions will be synchronous. You will not be forced to attend in person class sessions if you are concerned about your safety”. This explicit acknowledgment of remote participation and health-related flexibility was absent from earlier versions. Similarly, a computer science (Fall 2025) syllabus outlined specific technology requirements, including the need for “a modern web browser, broadband internet connection, and webcam and microphone,” and indicated that exceptions to deadlines could be made when technical issues were

documented through the IT Help Desk. This level of contingency planning and attention to access was not foregrounded in comparable pre-pandemic syllabi.

Assessment structures also reflected adaptation. A computer science (Fall 2025) syllabus explicitly states, “There will be no exams given in this course,” replacing traditional proctored exams with iterative game projects, workshops, and a final applied project. Post-pandemic syllabi across disciplines more frequently emphasized LMS-based submission, structured digital communication channels, and explicit online participation protocols. For instance, Music (Spring 2021) syllabus directs students to communicate via Canvas and to upload assignments through the LMS rather than submit by email. These documented shifts demonstrate how barriers related to modality uncertainty, technology access, and workload pressures became embedded in formal course documents. Rather than merely describing adaptation in interviews, faculty codified flexibility, digital contingency planning, and alternative assessment strategies directly within syllabi, providing documentary corroboration of interview findings.

Theme 4: Facilitators Supporting Effective Teaching Practices

Despite the significant challenges faculty faced during the transition to online and hybrid instruction, participants consistently identified specific institutional supports that facilitated their ability to adapt and ultimately teach more effectively. These facilitators were not abstract ideas, but people, offices, and structured resources within the university. Faculty repeatedly referenced instructional designers, IT Help Desk staff, college-level technology coordinators, and formal professional development workshops as critical sources of support. Many described one-on-one consultations with instructional design staff who reviewed Canvas course sites, suggested ways

to organize modules, and provided feedback on assessment structure. Others emphasized the availability of technical support personnel who assisted with Zoom setup, video recording, troubleshooting connectivity issues, and LMS configuration during high-stress periods.

In addition to formal support units, faculty identified peer collaboration and shared resources as important facilitators. Several described colleagues sharing Canvas templates, recorded demonstrations, assignment examples, and informal guidance during department meetings or through email exchanges. Participants also pointed to timely, practice-focused professional development sessions that addressed immediate needs such as recording lectures, creating accessible documents, or managing online discussions. Importantly, faculty emphasized that institutional leadership often allowed flexibility in course design decisions, which enabled them to implement changes suited to their discipline and students. Together, these supports contributed to increased instructional confidence, stronger course organization, and sustained improvements in teaching practices that extended beyond the emergency period.

Faculty Perspectives: Instructional Designers as Essential Support. Across participants, instructional designers (IDs) were consistently identified as one of the most valuable sources of support during the transition to online and hybrid teaching. At this large midwestern university, some IDs were housed centrally and four of the colleges within the university had their own. All of the IDs worked with faculty across multiple colleges, providing consultation on course organization, Canvas structure, accessibility, and digital assessment strategies. Faculty did not describe seeking highly specialized disciplinary integration (e.g., advanced engineering-specific tools); rather, most emphasized the need for foundational support in structuring modules, aligning objectives with assessments, building clear navigation pathways

in the LMS, and translating face-to-face teaching into an online format that made expectations explicit.

Participants described in IDs as practical problem-solvers who provided both technical and pedagogical guidance. P11, an advanced instructor who taught marketing explained, “The instructional designers showed me how to break things down and build a course that made sense. I couldn’t have done it without them.” In this context, P11 was referring to restructuring course content into weekly modules, clarifying assignment instructions, and sequencing activities so that students could follow a predictable pattern online. Similarly, P2, who had previously relied heavily on in-person lecture delivery, shared, “Every time I had a question or got stuck, the IDs were there. They helped me move from just posting content to actually designing an online course.” P2 described learning how to use Canvas tools intentionally rather than as a storage space for files, including organizing content into modules, embedding videos, and designing discussion prompts that aligned with course objectives.

Faculty also highlighted the individualized nature of ID support. One-on-one consultations allowed them to bring specific challenges, such as converting lab activities, redesigning assessments, or improving student navigation, and receive targeted feedback. Several participants emphasized that this support was especially critical during the early months of the transition, when time pressure and uncertainty were high. Beyond solving immediate technical problems, IDs helped faculty build confidence in course planning and digital pedagogy. Participants noted that over time, they became more independent in course design decisions, suggesting that instructional design support functioned not only as short-term crisis assistance but also as long-term capacity-building.

Faculty Perspectives: Peer Collaboration and Informal Professional Communities.

In addition to formal institutional supports, some faculty participants (3 of 16) explicitly identified peer collaboration as an important facilitator during the transition to online instruction. Although not universally emphasized, those who described it portrayed collaboration as both practically valuable and emotionally stabilizing. Informal professional communities, primarily within departments, became spaces for sharing strategies, troubleshooting technology, and modeling course design approaches in real time. For these participants, peer interaction functioned as an immediate and discipline-specific form of support that complemented, and in some cases preceded, formal institutional guidance.

P9, an arts and sciences associate professor, gave the most detailed account of department-level collaboration, explaining, “One was the colleagues in my department... We were all feeding in off of each other”. This participant described increased department meetings during the pandemic to “check in on each other” and discuss instructional approaches. Collaboration extended beyond conversation; P9 and a colleague developed training videos to teach others how to use iPads for live instruction and shared those materials across departments. Similarly, P15, a professor of practice in the college of business, described how informal expertise within the department accelerated adaptation. Once colleagues recognized who had prior online experience, they began modeling their practices accordingly, asking, “How can we model off of her and some of our other people who have more of this technology-driven mindset and experience?”

Although only a subset of participants explicitly emphasized peer collaboration, those who did described it as immediately applicable, context-specific, and supportive during a period of uncertainty. These exchanges not only informed instructional decisions but also reinforced a

sense of shared responsibility within departments. Together, the findings suggest that informal faculty networks supplemented formal institutional supports and contributed to adaptive capacity during the transition to emergency remote teaching.

Faculty Perspectives: Timely and Practical Professional Development.

Professional development emerged as a facilitator of effective teaching practices when it was timely, applied, and directly connected to immediate instructional challenges. Faculty experiences with professional development, however, varied. Those who described positive experiences emphasized workshops and individualized support that provided concrete examples rather than abstract theory. For instance, P11 characterized their instructional designer as “absolutely... a phenomenal resource” and highlighted the value of workshops and shared model Canvas courses. Being able to review and adapt fully developed course shells allowed this participant to translate ideas directly into practice. Similarly, professional learning occurred through hands-on problem solving within departments. P9, who teaches in the arts and sciences, described collaborating with a colleague to create step-by-step YouTube videos demonstrating how to connect iPads to Zoom for live instruction. These resources addressed immediate instructional barriers and were shared across departments, functioning as applied, peer-generated professional development.

At the same time, professional development was not uniformly experienced as strategic or comprehensive. P2, who teaches in the College of Education reflected that “there was never an intentional strategy to like equip the teacher in my opinion”, suggesting variability in how institutional support was perceived, even within the same college. P15, who teaches in the College of Business similarly described institutional communication and resources as initially “a trickle”, indicating that support structures developed gradually rather than through a coordinated

plan. Nevertheless, when professional development was concrete, example-driven, and responsive to specific instructional needs, faculty described it as strengthening both instructional confidence and skill. These findings suggest that the effectiveness of professional development during the transition depended less on its quantity and more on its relevance, accessibility, and practical application.

Faculty Perspectives: Autonomy, Creativity, and Flexibility in Course

Design. Another key facilitator identified by faculty was the increased autonomy they experienced during the pandemic, which allowed for experimentation and creativity in course design. Participants described having greater freedom to reconsider long-standing instructional practices and redesign courses in ways that better aligned with student needs and learning outcomes. This autonomy was particularly meaningful during a time of disruption, as it empowered faculty to make context-specific decisions rather than adhere rigidly to traditional norms. P7, a psychology faculty member, described using this flexibility to redesign his course structure into a flipped classroom format during the return to campus. Rather than reverting fully to lecture, he continued using the videos he had recorded and structured class time around discussion and application. He also experimented with online exams in Canvas and adopted SpeedGrader for digital feedback, changes he ultimately chose to retain. When reflecting on future possibilities, he imagined incorporating staged in-class demonstrations to test students' observational memory and polling or pre-assessment tools to make lectures more interactive. Although not all experiments were equally successful, these examples illustrate how autonomy created space for pedagogical risk-taking and instructional innovation.

Similarly, P12 described using the disruption as an opportunity to rethink assessment and course policies in ways that aligned with an already flexible teaching philosophy. Drawing on

prior exposure to professional development encouraging smaller, more frequent assessments, P12 explained that the pandemic “forced me to make that transition” away from large, high-stakes exams toward low-stakes, ongoing evaluation. This shift was accompanied by a communication-centered attendance approach in which students who notified the instructor in advance could access recorded lectures without penalty. Faculty described experimenting with alternative assessment formats, flexible policies, and new communication strategies. This sense of creative agency contributed to increased motivation and engagement, encouraging faculty to take ownership of their instructional redesign. Over time, many participants reported that these innovations became integrated into their regular teaching practices, extending the influence of autonomy beyond the immediate crisis.

Administrator Perspectives: Support as Relationship-Based, Not Just

Structural. Administrator interviews suggest that instructional support during the transition was experienced as relational rather than purely procedural. A4 emphasized that “faculty with faculty is huge” and described “faculty just kind of spontaneously supporting one another”. Similarly, A1 observed “a lot of local peer support, a lot of sharing of what worked and what didn’t”. These accounts indicate that while institutional policies and training existed, administrators perceived peer exchange and informal collaboration as central mechanisms through which faculty adapted to new instructional demands.

A1 who was directly involved in coordinating both facilities adjustments and digital instructional preparation during the transition, described how leaders intentionally created opportunities for faculty learning to circulate organically. He explained that the institution “started creating a lot more, hey, let’s create opportunities for people to just share what works and what doesn’t with each other and get out of the way”. Successful instructors were identified

and “trying to expose them to others”, including Zoom sessions where faculty discussed modifications to attendance practices and answered peer questions. Rather than mandating uniform practices, administrators described facilitating visibility and peer modeling.

A1 and A2 also acknowledged uneven readiness across departments. As noted, “people may have handled it a little differently”, and some units were “able to do something with it” while others “continued to live in some of that chaos”. In response, localized mentoring emerged, with faculty stepping forward to assist colleagues, “hey, everybody else, I’m getting this and I can help my peers send them to me”. Together, these administrator accounts suggest that while structural supports were necessary, adaptation was sustained through interpersonal trust, peer modeling, and department-level collaboration.

Administrator Perspectives: Instructional Designers and Academic Support Units Mediating Policy and Practice. Administrator interviews confirm that institutional support for instructional adaptation extended beyond policy announcements and technology access. Several administrators described how digital teaching preparation was coordinated through Global Campus and academic technology leadership. A1, from the information technology department, explained that “the work led by [name withheld] at the time and sort of the global campus folks on what we were going to do digitally to prepare people to get them onboarded into new tools and to have training and support services and then support them as they actually taught”. This description indicates that preparation was not limited to initial tool distribution but included ongoing instructional support during course delivery.

Administrators also described institutional mechanisms that linked evolving policy guidance with instructional implementation. A1 recounted how academic leadership set guardrails around grading and flexibility while also gathering operational feedback and adjusting

policy in real time. In this context, support units such as Global Campus and academic technology teams functioned as implementation partners, helping faculty operationalize policy decisions within their courses. Rather than leaving instructors to interpret directives independently, training sessions, onboarding into digital tools, and continued support during teaching created a bridge between institutional expectations and day-to-day instructional practice.

Support also extended through IT and licensing decisions that enabled faculty to implement remote instruction. A1 described instances in which the university approved expanded software licenses and storage capacity when usage increased. A5, a college dean, noted that “we had a lot of faculty that had to set courses up from scratch in Canvas”, underscoring the need for structured technological assistance. Together, these administrator accounts suggest that institutional support during the pandemic operated through coordinated digital training, licensing adjustments, and ongoing academic technology assistance. While not all administrators explicitly foregrounded instructional designers by title, they consistently referenced organized digital preparation efforts that mediated between rapidly evolving institutional policy and classroom-level implementation.

Connections to Syllabus Analysis. Document analysis of eight matched pre- and post-pandemic syllabi provided concrete evidence of structural and policy-level changes in course design. Across several pairs, including Geography (2019–2022), Management (2019–2025), Business (pre-pandemic–2024), post-pandemic syllabi demonstrated more explicit weekly or module-based organization. Whereas earlier versions primarily listed topics and due dates, later syllabi more consistently articulated structured learning sequences, integrating readings, deliverables, and learning activities within clearly defined weekly modules housed in Canvas.

These differences are visible in how course flow and expectations are communicated within the documents themselves.

Expanded integration of instructional technologies was also evident in multiple matched courses. Post-pandemic syllabi more frequently positioned Canvas as the central instructional platform, explicitly requiring students to submit assignments, complete quizzes, and participate in discussions through the LMS. For example, the 2025 Management syllabus requires students to record and upload video analyses as part of regular coursework, a requirement not present in the 2019 version. Updated versions of Computer Science, Music, and Psychology similarly include references to Zoom participation, digital submissions, and LMS-based engagement that were either absent or less prominently emphasized in earlier syllabi.

Policy language also shifted in several matched pairs. In Geography, the 2019 syllabus states, “Attendance is expected at all scheduled class meetings. More than three unexcused absences will lower the final grade.” The 2022 version introduces conditional language: “Attendance expectations may be adjusted due to illness, quarantine, or technology limitations. Students should communicate proactively regarding participation challenges.” Comparable communication-based flexibility appears in post-pandemic versions of Psychology and Computer Science. These documented differences demonstrate that structural organization, technology integration, and policy framing were revised in measurable ways within formal course documents following the transition to online and hybrid instruction.

Theme 5: Long-Term Pedagogical Shifts and Future Directions in Higher Education

Theme 5 captures instructional and professional shifts that faculty described as persisting beyond the initial (ERT) transition in Spring 2020. While early adaptations were made under

crisis conditions, participants reported changes that continued to evolve from Spring 2021 through Spring 2025, when interviews were conducted. Faculty described reexamining long-standing assumptions about course structure, assessment practices, student engagement, and flexibility in instructional delivery. Rather than viewing these adjustments as temporary responses, many characterized them as recalibrations of how they approach teaching in an evolving post-pandemic environment. The following sections detail how these longer-term shifts manifested in instructional design, assessment philosophy, technology integration, and expectations for student engagement.

Faculty Perspectives: Normalization of Hybrid and Online Teaching Practices. Half of the faculty participants (8 of 16) explicitly described continuing to integrate online and hybrid elements into their teaching beyond the ERT period. Rather than reverting fully to pre-pandemic formats, these faculty reported intentionally retaining practices they found improved course organization, accessibility, or student engagement. Participants used clear continuation language such as “I still...,” “I kept...,” or “I continue...” when describing their instructional approaches. For example, P10, who teaches a large undergraduate course with regular in-person meetings, explained, “I still allow someone who wants to zoom in on an in-person class because they're sick or something.” P15, who teaches courses with significant written and project-based components, similarly stated, “I have kept things module locked,” and described maintaining “virtual check-ins... even outside of [the] pandemic.”

Other participants referenced continuing to use recorded lectures, hybrid formats, online exams, or Canvas-based module organization even after returning to primarily face-to-face instruction. While not all faculty described permanent changes, those who did framed these strategies as integrated components of their current teaching practice rather than temporary

accommodations. Together, these accounts indicate that for approximately half of participants, blended instructional design has become a normalized element of course delivery rather than an emergency response.

Faculty Perspectives: Increased Emphasis on Empathy and Human-Centered Teaching. Faculty also described a notable cultural shift in how they understood students' experiences. Many reported becoming more aware of the challenges students face outside their academic work. This increased awareness led faculty to reflect more carefully on how course expectations intersected with students' lives outside the classroom. As a result, faculty described adopting more empathetic and human-centered approaches to teaching. These approaches emphasized clearer communication, greater flexibility, and stronger relationships with students. P6, an engineering faculty teaching introductory courses stated, "I'm more understanding now. Students have jobs, family issues, and other challenges. The pandemic made me rethink what's actually important." Faculty emphasized that this shift did not reflect lowered expectations, but rather a more intentional alignment of policies and practices with student needs. As P12, a faculty member teaching large enrollment courses shared, "I learned that being flexible doesn't mean lowering standards. It means helping students meet the standards." Participants described revising policies related to deadlines, participation, and communication to create supportive learning environments while maintaining academic rigor. This shift reflects a broader cultural change in how faculty understand their roles as instructors and mentors.

Faculty Perspectives: Greater Expectations for Institutional Support and Training. Faculty recognized both the professional growth that occurred during the pandemic and the need for sustained institutional support moving forward. P3, a faculty member in the College of Engineering emphasized the importance of structured and discipline-specific support, explaining

that “really having more coherent support of discipline-based education research” would be valuable. P3 also identified mentoring as an essential yet underdeveloped area, noting that “just mentoring programs for new faculty... [is] low hanging fruit” and arguing that effective support “needs to be department level” to ensure appropriate specificity. Similarly, P7, a faculty member in Arts and Sciences described relying primarily on colleagues rather than institutional structures during the transition, stating, “We didn't get external help at all. We were all feeding in off of each other”. Together, these statements reflect faculty expectations that meaningful professional growth requires ongoing, structured, and context-specific instructional support beyond the immediate crisis period.

Faculty Perspectives: Reevaluation of Assessment and Engagement Practices.

Several participants described lasting changes in how they approach assessment design following the pandemic. Rather than relying exclusively on traditional, high-stakes testing formats, some faculty adjusted the structure and delivery of assessments to better align with online and hybrid instruction. For example, P14, a business faculty member explained that they “changed the test” format and moved to “open book essay exams”. Similarly, P11, another business faculty member, described shifting toward more frequent evaluation, stating, “And I moved to, you know, weekly quizzes untimed”. P7, a faculty member who uses the LMS for the bare minimum before the pandemic, also described a permanent shift away from paper-based testing, explaining that “the biggest evolution was moving all exams into Canvas and letting Canvas take care of my exams. Not trading paper anymore,” adding, “I would not go back to having them turn in physical copies of their work... This is just so much more convenient”. Faculty also described increasing intentional efforts to maintain interaction and engagement across both synchronous and asynchronous environments, emphasizing structured interaction, consistent feedback, and

flexible participation formats. Together, these findings indicate that assessment and engagement practices were not merely temporary adjustments but reflect sustained instructional refinements shaped by pandemic-era experimentation.

Administrator Perspective: Cultural and Attitudinal Shifts. Administrators described observing a noticeable cultural shift in how some faculty approached flexibility and student interaction during and after the pandemic. A1, an information technology administrator, explained that institutional conversations deliberately addressed academic rigidity, noting that leadership had to clarify that faculty “couldn’t give people a failing grade if they didn’t turn it in by the 5pm deadline in a course that just went online unexpectedly three weeks earlier” . This administrator also described discussions about balancing faculty autonomy with institutional guardrails so that “students’ experiences were as smooth as possible” . These comments reflect administrative awareness that faculty practices were being recalibrated in response to the crisis.

A1 characterized the most lasting change as cultural rather than procedural, describing “a meaningful shift in existing faculty... to approach assessment and knowledge attainment a bit differently” . The same administrator observed that some faculty became “a little more humanistic with your students and a little less institutional”, framing this shift as one of the more positive long-term outcomes of the pandemic period. However, administrators also noted recalibration over time. A2, a college dean, stated their impression that “those people that were rigid before probably still are rigid again”, suggesting that while flexibility increased during the crisis, not all changes were permanent. Together, these observations indicate that administrators perceived both temporary adjustments and more enduring cultural shifts in faculty attitudes toward flexibility, assessment, and student engagement.

Administrator Perspectives: Preparedness for Future Disruptions. Administrators expressed cautious optimism about institutional preparedness, but their comments also revealed specific concerns about sustainability and capacity. A2 emphasized that while the university adapted quickly during the crisis, preparedness now depends heavily on resilience rather than formal structural change, stating that the key lesson learned was “resilience... we could accomplish things and do things differently”. However, this same administrator acknowledged that innovation often depends on individual initiative rather than systemic transformation, noting that some faculty remain innovative while “some are kind of, you know, this is how I do it”. This suggests uneven sustainability of instructional change across units.

A1 directly identified workload and capacity as a central concern during and after the transition. They described faculty asking, “how many hours do you actually expect me to work every day to answer all these emails and grade all these new online assignments”, framing expanded instructional demands as a long-term operational strain. The same administrator further emphasized financial sustainability challenges, explaining that many instructional adaptations required new tools and licenses and repeatedly raised the question, “who’s paying for it?”. These comments indicate that while the institution demonstrated adaptability during crisis conditions, administrators remain concerned that continued preparedness depends on sustained investment, manageable faculty workload expectations, and institutional decisions about centralized versus unit-level resource allocation.

Connections to Syllabi Analysis. Analysis of pre- and post-pandemic (Spring 2021 and later) syllabi provides tangible evidence that the instructional adaptations described by participants represent sustained pedagogical shifts rather than temporary responses to emergency remote teaching. Pre-pandemic syllabi primarily positioned digital tools as supplemental to face-

to-face instruction. For example, the Geography syllabus emphasizes that “lecture and lab attendance is expected and will be tracked”, reflecting a model grounded in physical classroom presence. Canvas is referenced primarily for distributing materials and posting grades rather than serving as the primary site of instruction, reinforcing a traditional, co-present instructional structure.

In contrast, post-pandemic syllabi demonstrate normalization of technology-mediated course design and structural flexibility. The Spring 2025 Communications syllabus explicitly identifies the course as “Asynchronous online, via Canvas”, signaling an intentional shift toward fully online delivery. Similarly, the Spring 2025 Computer Science syllabus integrates automated grading platforms and codifies flexibility by granting students one “freebie” extension per semester. These embedded structural features indicate that flexibility and digital infrastructure are no longer contingency measures but formalized elements of course design.

Post-pandemic syllabi also reflect adaptation to emerging technological realities. For example, Communications includes explicit guidance stating that using “an AI-content generator ... to complete coursework” constitutes academic dishonesty, and Computer Science formally prohibits “AI text and code generators such as ChatGPT”. The inclusion of such policy language, alongside structured online engagement practices and digital communication norms, suggests that faculty have recalibrated instructional practices to align with evolving technological environments. Collectively, these documented revisions substantiate Theme 5 by illustrating that pandemic-era adaptations have solidified into enduring pedagogical practices shaping future directions in higher education.

Post-pandemic syllabi further demonstrated increased attention to communication and transparency. Detailed communication guidelines frequently specified preferred channels and

response-time expectations, items that were less detailed in pre-pandemic syllabi. For example, the Computer Science syllabus instructs students to “avoid using the Canvas email functionality” and instead use a designated course help email to ensure coordinated instructor and TA responses. Similarly, an upper-level Computer Science identifies Ed Discussions as the “preferred means of communication” for course-related questions, formalizing digital communication pathways. These structured directives reinforce faculty emphasis on clarity, predictability, and consistent interaction in technology-mediated environments.

Additionally, many post-pandemic syllabi contained expanded accessibility and inclusion language. For instance, Computer Science includes a “Mutual Respect and Inclusion in K-State Teaching & Learning Spaces” statement, while communications directs students to the Student Access Center and outlines procedures for implementing Letters of Accommodation. The presence of this explicit accessibility framing, alongside clearly articulated communication expectations, suggests heightened awareness of equity, support structures, and inclusive design considerations that gained prominence during the pandemic and continued thereafter.

Summary

This chapter presented the findings of a qualitative case study examining how faculty at a large midwestern public research university adapted their teaching practices following the COVID-19 pandemic. Data was obtained from interviews with 16 faculty members, five administrators, and a document analysis of pre- and post-pandemic course syllabi, providing multiple perspectives on instructional change during and after ERT. Through thematic analysis, five major themes emerged that illustrate the evolving nature of faculty adaptation. Findings showed that faculty moved from initial disruption and uncertainty toward more intentional and flexible teaching approaches, accompanied by increased confidence with instructional

technologies and growth in teaching self-efficacy. At the same time, participants described ongoing barriers related to workload, communication, student engagement, and access to technology. Participants also identified facilitators such as instructional design support, peer collaboration, and professional development opportunities. Syllabi analysis reflected many of these changes through shifts in course organization, communication expectations, flexibility, assessment practices, and technology integration. Collectively, the findings demonstrate that faculty adaptation was not a single event, but an evolving process shaped by individual experience, institutional context, and continued reflection on teaching practices.

Chapter 5 interprets the findings presented in Chapter 4 in relation to the study's research questions, theoretical frameworks, and existing literature on online and hybrid teaching in higher education. Whereas Chapter 4 described the experiences reported by faculty and administrators, Chapter 5 analyzes the meaning of those experiences within broader discussions of instructional change following the COVID-19 pandemic. The five themes identified in the findings are examined through the lenses of SDT, the TAM, and teaching self-efficacy to better understand how motivation, perceptions of technology, and instructional confidence influenced faculty decision-making and sustained pedagogical change. The chapter also discusses implications for institutional practice, recommendations for future research, and the study's contributions to understanding post-pandemic teaching in higher education.

Chapter 5 - Discussions and Implications

Introduction

The purpose of this chapter is to interpret and analyze the findings presented in Chapter 4 in relation to the study's research questions, theoretical frameworks, and literature on online and hybrid teaching in higher education. Whereas Chapter 4 described what faculty and administrators experienced during and after the COVID-19 pandemic, this chapter contextualizes those experiences, drawn from faculty and administrator interviews and documented changes in pre- and post-pandemic course syllabi, within broader conversations about instructional change. Attention is given to practices first adopted during the transition to ERT in Spring 2020 and further developed in Fall 2020, which participants reported continuing after the return to campus in Spring 2021 and at the time interviews were conducted in 2025. In this study, sustained adaptation refers to instructional practices initiated during the emergency period that were intentionally retained and refined across multiple subsequent semesters.

This study is interpreted through three complementary theoretical lenses: Self-Determination Theory (SDT), the Technology Acceptance Model (TAM), and teaching self-efficacy. Although the analysis was conducted inductively, these frameworks provide lenses for interpreting how motivation (autonomy, competence, relatedness), perceptions of technology (usefulness and ease of use), and beliefs about instructional capability shaped faculty decision-making and ongoing instructional practices. Administrator perspectives are also considered in relation to these constructs by providing context about institutional structures, policies, and supports that influenced faculty experiences. The discussion is organized by the five themes identified in Chapter 4, connecting findings to theory and prior scholarship, and concluding with

implications for practice, recommendations for future research, and a summary of the study's contributions to understanding post-pandemic teaching in higher education.

Interpretation of Findings by Theme

This section interprets the study's five major themes through the lenses of SDT, TAM, and teaching self-efficacy, while connecting the results to existing research on faculty adaptation and online instruction. Collectively, these interpretations demonstrate how faculty navigated rapid instructional change and how their experiences contributed to sustained pedagogical shifts in the post-pandemic environment. Table 5.1 illustrates the connections between the theoretical frameworks and the themes found in the research data.

Figure 5.1

Connections Between Themes and Theoretical Frameworks

Theme	SDT Connections	TAM Connections	Self-Efficacy Connections
Adaptation	Autonomy, Competence	Usefulness	Mastery experiences building confidence
Technology Growth	Competence	Usefulness, Ease of Use	Increased confidence with repeated success
Barriers	Autonomy, Competence	Ease of Use (initially)	Lower confidence early in transition
Facilitators	Relatedness, Competence	Ease of Use	Vicarious learning; supported mastery
Long-Term Shifts	Autonomy-supportive teaching	Continued usefulness	High sustained self-efficacy

Theme 1: Adaptation

Faculty adaptation developed from an emergency response into teaching that was shaped by experience rather than urgency. During the earliest stages of the pandemic, faculty described operating under significant pressure to maintain instructional continuity, often making quick decisions with limited time for planning or reflection. These experiences closely aligned with what Hodges et al. (2020) describe as ERT, where the primary goal was to keep courses functioning rather than to ensure instructional quality. As faculty gained experience teaching in online and hybrid environments, many began to move beyond simply transferring face-to-face materials into digital formats. Instead, they described rethinking how courses were

structured, how content was delivered, and how students engaged with material across modalities. Over time, this process resulted in more sustainable approaches to online and hybrid teaching that were better aligned with established distance education practices. Faculty narratives suggest that adaptation was not a single transition point, but an ongoing process of learning that continued well beyond the immediate crisis.

Connections to Theoretical Frameworks. The findings of this study can be interpreted SDT, which theorizes that motivation is shaped by the fulfillment of three basic psychological needs: autonomy, competence, and relatedness (Deci & Ryan, 1991). Rather than suggesting that faculty consciously framed their experiences in these terms, SDT provides a useful interpretive framework for understanding how institutional conditions shaped faculty motivation during and after the pandemic. For example, during the early stages of emergency remote teaching (Spring 2020), faculty described centralized decision-making at the university level and frequently changing guidance that limited their perceived autonomy. Participants reported uncertainty about attendance policies, modality expectations, and assessment structures, which constrained their ability to make instructional decisions aligned with their teaching philosophies. As institutional messaging stabilized in Fall 2020 and Spring 2021, faculty described regaining control over course design, including restructuring weekly modules, revising assessments, and clarifying communication expectations in their syllabi. This restored ability to make meaningful instructional choices reflects the SDT construct of autonomy and helps explain renewed engagement and investment in course redesign.

Faculty perceptions of competence, a second SDT construct, were similarly shaped by institutional support structures. Interview data revealed that access to instructional designers, targeted workshops, and troubleshooting support allowed faculty to move beyond basic

technology use toward more intentional integration of digital tools. For instance, participants described learning to design consistent LMS modules, align assessments with learning outcomes, and use analytics to monitor engagement. These developments were also reflected in syllabi through clearer modular organization, detailed communication policies, and diversified assessment strategies. Rather than one-time exposure to tools, faculty emphasized gradual mastery over multiple semesters, suggesting that sustained institutional support contributed to increased instructional competence. Interpreted through SDT, these conditions supported internalized motivation by reinforcing faculty beliefs that they were capable of teaching effectively across modalities.

The third SDT construct, relatedness, was evident in faculty descriptions of peer collaboration and shared problem-solving. Participants highlighted informal department meetings, shared Canvas templates, and peer-generated training videos as meaningful sources of connection. These interactions reduced isolation during remote teaching and normalized the learning curve associated with new modalities. Syllabi revisions that incorporated clearer communication channels and structured participation expectations also reflected a relational emphasis, signaling intentional efforts to maintain connection with students. When institutions supported spaces for collaboration and dialogue, faculty reported feeling more engaged and less isolated, reinforcing the SDT proposition that social connection supports sustained motivation.

The findings may also be interpreted through the TAM (Davis, 1989), which proposes that individuals' technology adoption decisions are influenced primarily by perceptions of usefulness and ease of use. During early ERT, faculty often described technology adoption as compulsory rather than intentional. However, as institutional communication clarified expectations and training reduced ambiguity, faculty reported perceiving instructional

technologies, particularly the learning management system and video tools, as more manageable and aligned with their goals. Interview participants noted that structured modules reduced repetitive emails and that recorded lectures enhanced student access. These perceptions reflect TAM's construct of perceived usefulness. Similarly, access to troubleshooting support and repeated practice increased faculty comfort with platforms such as Canvas and Zoom, aligning with TAM's construct of perceived ease of use. Rather than contradicting TAM, these findings suggest that institutional conditions can mediate how usefulness and ease of use are experienced over time, raising questions about how organizational stability influences technology acceptance beyond individual attitudes alone.

Finally, the findings connect to teaching self-efficacy, grounded in Bandura's (1997) social cognitive theory, which emphasizes beliefs in one's capability to organize and execute actions required to achieve desired outcomes. Faculty described gaining confidence through mastery experiences, including successfully redesigning assessments and managing hybrid formats. Peer modeling and administrator reassurance further reinforced these beliefs. For example, faculty who initially expressed uncertainty about online exams later described intentionally retaining Canvas-based assessments because they felt capable of managing them effectively. Administrators similarly observed increased willingness among faculty to experiment with instructional strategies once initial challenges were overcome. These experiences reflect the core components of self-efficacy development, mastery, vicarious learning, and social persuasion, and help explain why instructional adaptations were sustained beyond emergency conditions.

Connections to Existing Literature. Existing literature documents that during the initial transition to emergency remote teaching in Spring 2020, faculty adaptation was

characterized by rapid technological and pedagogical shifts implemented with limited preparation time (Lach et al., 2021; Hodges et al., 2020). Faculty in this study described similar conditions during Spring 2020, including learning new platforms within days, revising assessments mid-semester, and responding to shifting attendance and modality guidance. These accounts mirror prior research identifying the early pandemic period as reactive and urgency-driven rather than strategically designed (Solberg & Tømte, 2023; Orozco et al., 2023). Participants emphasized prioritizing instructional continuity and student access over pedagogical refinement, consistent with Hodges et al.'s (2020) distinction between intentionally designed online learning and emergency remote teaching. Additionally, faculty reports of uncertainty regarding institutional messaging align with findings by Nokkala et al. (2023), who documented dissatisfaction with institutional clarity and support during the early pandemic response. Taken together, the Spring 2020 experiences described in this study reinforce established characterizations of early pandemic teaching as shaped primarily by necessity rather than long-term instructional planning.

However, this study extends existing literature by examining what occurred after the initial emergency phase. While some scholars have advocated for a return to pre-pandemic instructional norms (Malesic, 2022), others have suggested that blended or hybrid practices may persist as normalized elements of higher education (Qamar, 2021; Tilak & Kumar, 2022). Faculty in this case described not only adapting during Spring and Fall 2020 but intentionally retaining and refining selected instructional strategies following the return to campus in Spring 2021 and continuing through the time interviews were conducted in 2025. These retained practices included modular course organization, diversified assessment strategies, structured LMS communication, and flexible participation policies, changes also documented in post-

pandemic syllabi. Consistent with findings by Power et al. (2023), who reported faculty intentions to continue using digital strategies beyond the pandemic, participants in this study provided longitudinal evidence that such intentions translated into sustained implementation over multiple academic years. In this case, adaptation did not conclude with the end of emergency conditions but evolved into ongoing pedagogical recalibration.

Rather than suggesting that these changes are entirely new or unprecedented, the findings in this study provide concrete evidence that some instructional adjustments made during the pandemic were sustained over time. Within this institutional case, ERT was not only a disruption, but also an opportunity for faculty to experiment with new approaches that they later chose to keep. Instead of simply returning to pre-pandemic practices, many faculty blended traditional and digital strategies in ways that reflected what they learned during this period. These patterns suggest that post-pandemic teaching at this institution represents an intentional recalibration rather than a full return to previous norms.

Connection to the Research Question. These findings directly address Research Question 1, which asked how faculty adapted their teaching methods in response to the transition to online instruction due to COVID-19, and Research Question 2, which examined what teaching practices and technologies were adopted and how faculty perceived their effectiveness. The data indicate that adaptation extended beyond the initial emergency period in Spring 2020. Most faculty participants (e.g., 10 of 16) described instructional changes that continued after the return to campus in Spring 2021 and remained in place through the time interviews were conducted in 2025. Rather than reverting fully to pre-pandemic practices, faculty reflected on what had worked, what had not, and how their teaching evolved across multiple semesters.

Faculty described a shift from reactive adjustments during Spring 2020 to more intentional instructional decision-making beginning in Fall 2020 and continuing in subsequent years. Early adaptations were often driven by urgency and uncertainty. However, over time, participants reported refining course organization, assessment strategies, and technology integration based on experience and student feedback. Instructional decisions became less about compliance with emergency expectations and more about improving clarity, flexibility, and student engagement. The continued use of modular course design, structured communication practices, and selective digital tools suggests sustained instructional development rather than short-term adjustment.

These findings also respond to Research Question 2 by demonstrating that adopted technologies and hybrid practices were evaluated and intentionally retained when faculty perceived them as effective. Participants described keeping strategies that improved accessibility and course organization while discontinuing those that added complexity without clear benefit. Faculty narratives did not frame adaptation as either a complete return to pre-pandemic norms or full continuation of emergency practices. Instead, they reflected an ongoing process of refinement informed by experience, indicating that instructional change functioned as a multi-semester learning process rather than a temporary disruption.

Theme 2: Growth in Technology Use, Confidence, and Teaching Self-Efficacy

Faculty described significant growth in their use of instructional technology, accompanied by increased confidence and comfort in teaching online and hybrid courses. Early in the pandemic, many faculty reported hesitancy, uncertainty, or limited familiarity with digital tools, particularly those they had not previously used in face-to-face instruction. Initial technology adoption was often driven by necessity rather than preference, as faculty worked

to maintain communication, deliver content, and assess student learning in unfamiliar environments. Over time, however, faculty described moving beyond basic functionality toward more consistent and purposeful integration of technology into their courses. As experience accumulated, digital tools became embedded in regular teaching practice rather than viewed as temporary solutions. Faculty narratives suggest that growth in technology use was closely tied to increasing confidence and a shift in how instructors perceived their own capabilities as online and hybrid educators.

Connections to Theoretical Frameworks. Faculty experiences in this study can be interpreted through the lens of the TAM, particularly the constructs of perceived usefulness and perceived ease of use (Davis, 1989). TAM proposes that individuals are more likely to adopt and continue using technology when they believe it enhances performance (usefulness) and when it feels manageable or low in effort (ease of use). In the early months of Spring 2020, faculty narratives reflected uncertainty in both areas. Many questioned whether digital tools would meaningfully support student learning or simply add complexity during an already disruptive time. However, as faculty gained experience using learning management systems, recorded lectures, online assessment tools, and structured modules, several began to identify specific advantages. These included improved organization, clearer communication of expectations, faster grading through automated systems, and increased flexibility for students. These tangible instructional benefits strengthened perceptions of usefulness and contributed to continued technology use beyond the immediate emergency period.

Perceived ease of use also evolved over time. Faculty described initial frustration and cognitive overload during Spring 2020, followed by gradual increases in comfort as they practiced using platforms, attended training sessions, and relied on peer support. Administrators

similarly observed that repeated exposure reduced apprehension and decreased dependence on step-by-step institutional guidance. As digital tools became more familiar, faculty were less likely to describe them as burdensome and more likely to integrate them into routine course management. Consistent with TAM, when technology was perceived as both useful and manageable, faculty demonstrated stronger intentions to sustain its use, particularly for course organization, assessment, and communication. At the same time, the data also revealed variation, two of the faculty described returning largely to pre-pandemic methods or retaining technology only in limited, functional ways. This variation suggests that while TAM helps explain patterns of sustained adoption, acceptance was not universal nor uniformly transformative.

Faculty experiences can also be interpreted through Bandura's (1997) conceptualization of self-efficacy, defined as individuals' beliefs in their capability to organize and execute the actions required to achieve desired outcomes. In instructional contexts, teaching self-efficacy reflects confidence in one's ability to design learning experiences, manage classroom dynamics, and support student success. Faculty narratives illustrated growth in self-efficacy through repeated mastery experiences, such as successfully redesigning assessments, facilitating online discussions, or resolving technical challenges. These experiences reduced initial anxiety and increased confidence in navigating online and hybrid environments. However, the data do not suggest that faculty continuously pursued new innovations year after year. Rather, growth in self-efficacy appeared to stabilize technology use, making instructors more comfortable sustaining tools and practices they found effective.

Importantly, this growth was not limited to technical confidence. As described in Chapter 4, many faculty also reported a renewed emphasis on empathy, flexibility, and student experience. Increased flexibility in deadlines, recorded materials, and trauma-informed

awareness reflected not only technological adaptation but a shift in instructional mindset. In this way, the development observed in this study was both pedagogical and relational. While not all faculty sustained these changes to the same degree, the combination of increased perceived usefulness, improved ease of use, and strengthened teaching self-efficacy helps explain why many faculty retained selected online and hybrid practices beyond the immediate crisis period. Technology use, therefore, was intertwined with evolving beliefs about effective teaching and responsiveness to student needs.

Connection to Existing Literature. Existing literature has consistently documented increased faculty reliance on instructional technology during the COVID-19 pandemic, often driven by necessity rather than prior experience or preference (e.g., Johnson et al., 2020; Bao, 2020; Hodges et al., 2020). Faculty experiences in this study align with these findings, particularly in descriptions of rapid technology adoption during the transition to ERT. Early faculty narratives emphasized uncertainty, trial-and-error, and a focus on functionality as instructors worked to maintain communication, deliver content, and assess student learning in online environments. These experiences reflect broader research characterizing early pandemic technology use as reactive and shaped by immediate instructional demands.

However, the findings of this study extend existing literature by illustrating how faculty technology use evolved beyond emergency conditions. While many studies focus on initial adoption challenges, faculty in this study described continued growth in confidence and skill as they gained experience and support. Rather than abandoning digital tools once in-person instruction resumed, many faculty intentionally retained and refined technology practices that supported organization, flexibility, and student engagement. This aligns with research suggesting

that sustained technology use is more likely when instructors perceive tools as pedagogically valuable rather than merely necessary.

Additionally, this study contributes to scholarship linking technology use with faculty confidence and instructional identity. Faculty described increased comfort experimenting with new tools and integrating technology across modalities, reflecting a shift from hesitant adoption to more confident instructional practice. These findings align with literature indicating that positive experiences with technology can strengthen self-efficacy and support ongoing pedagogical innovation. Together, the findings suggest that technology adoption during the pandemic was not a temporary response, but part of a broader process of professional learning that continues to shape faculty teaching practices in post-pandemic contexts.

Connection to the Research Question. These findings directly address Research Question 2, which examined what teaching practices and technologies faculty adopted following the pandemic and how they perceived the effectiveness of those practices in supporting online and hybrid instruction. Faculty narratives indicate that technology adoption progressed from hesitant, necessity-driven use during Spring 2020 to more confident and sustained integration in subsequent semesters. Over time, faculty described developing a clearer understanding of which tools supported their teaching goals and how those tools could be adapted across instructional modalities. The continued use of digital technologies after the return to in-person instruction suggests that these changes were not temporary responses to crisis conditions. Instead, faculty described a lasting shift in both confidence and instructional practice shaped by experience and perceived effectiveness.

More broadly, the findings highlight how growth in technology use and teaching self-efficacy contributed to ongoing instructional change in post-pandemic contexts. Faculty

described making intentional decisions about when and how to use technology based on student needs, course design, and personal teaching preferences. This selective and reflective approach challenges assumptions that faculty technology adoption during the pandemic was purely reactive or short-lived. Instead, technology use became an integrated component of teaching practice for many participants. In addressing Research Question 2, this theme reinforces the conclusion that post-pandemic instructional change was sustained and developmental rather than a temporary adjustment driven solely by emergency conditions.

Theme 3: Workload, Time, and Structural Barriers to Online Course Redesign.

Faculty described significant workload increases and structural barriers that shaped their ability to redesign courses during and after the transition to ERT. The rapid shift in Spring 2020 required instructors to simultaneously learn new technologies, convert course materials, redesign assessments, and provide expanded student support. Many faculty characterized this period as “survival mode,” where the primary goal was maintaining continuity rather than engaging in thoughtful course redesign. The compressed timeline and absence of preparation time created substantial cognitive and emotional strain. Faculty emphasized that online course redesign was not a simple format shift, but a time-intensive process requiring careful planning, reorganization of materials, and rethinking of communication strategies.

Even after instructional modalities stabilized in Spring of 2021, time remained a persistent structural barrier. Faculty noted that meaningful online or hybrid redesign required significantly more upfront labor than face-to-face preparation. Competing responsibilities, including research, service, and personal disruptions, limited the time available for sustained redesign efforts. Some faculty reported refining their courses incrementally over multiple semesters due to workload constraints. While many described gradual improvements over time, a

small minority acknowledged reverting to familiar pre-pandemic practices when sustained redesign proved unsustainable within existing workload expectations. These variations suggest that structural capacity, not just individual motivation, shaped the extent and longevity of instructional change.

Connections to Theoretical Frameworks. From an SDT perspective (Deci & Ryan, 1991), sustained motivation depends on the satisfaction of autonomy (control over one's work) and competence (a sense of effectiveness). Structural barriers such as time constraints and workload intensity directly interfered with these needs during Spring and Fall 2020. Faculty described redesigning courses under compressed timelines and shifting institutional mandates, which limited their discretion and reduced opportunities for deliberate course planning. In these conditions, instructional decisions were often reactive rather than intentional, constraining autonomy and limiting the development of competence through iterative practice. As timelines stabilized and redesign occurred over multiple semesters, faculty reported regaining control over instructional decisions and feeling more capable in online and hybrid environments. Workload also shaped technology adoption in ways consistent with the TAM (Davis, 1989), which emphasizes perceived usefulness and perceived ease of use. Even when faculty recognized the potential usefulness of digital tools, heavy workload reduced perceptions of ease of use. Tools that streamlined communication or organization were more likely to be retained because they reduced effort, whereas technologies requiring significant setup were often abandoned. Together, SDT and TAM clarify how structural conditions shaped both motivation and sustained technology integration.

Structural constraints also influenced teaching self-efficacy, defined by Bandura (1997) as belief in one's capability to successfully execute instructional tasks. Bandura identifies

mastery experiences as the strongest source of self-efficacy development; however, limited time for experimentation restricted opportunities for repeated, successful practice. Faculty who described redesign occurring incrementally over multiple semesters reported greater confidence than those who implemented changes under urgent conditions. These findings suggest that workload and time were not merely logistical concerns but central determinants of whether faculty developed sustained confidence and instructional growth. Structural capacity, therefore, played a critical role in shaping the depth and durability of post-pandemic course redesign.

Connection to Existing Literature. These findings align with early pandemic scholarship documenting substantial increases in faculty workload during Spring and Fall 2020 (Bozkurt et al., 2020; Watermeyer et al., 2021). Prior studies characterize ERT as cognitively demanding and labor-intensive, particularly due to compressed timelines, limited preparation, and the need to simultaneously learn new technologies while maintaining instructional continuity (Hodges et al., 2020). Faculty in this study described similar conditions, frequently referencing long hours spent converting materials, redesigning assessments, and responding to expanded student communication. Consistent with research highlighting gaps in digital competence and infrastructure during early pandemic phases (Solberg & Tømte, 2023), participants emphasized that the initial transition required rapid decision-making under uncertainty, leaving little time for intentional pedagogical redesign. In this respect, the experiences reported in this case reinforce broader findings that early pandemic teaching was shaped more by urgency than by strategic instructional planning.

However, this study extends existing literature by illustrating how workload functioned not only as an immediate crisis response but as an ongoing structural constraint. While some early scholarship framed increased workload as a temporary byproduct of the emergency

transition, faculty in this case described sustained time pressures extending into 2021 and beyond. Even as instructional modalities stabilized, meaningful online or hybrid redesign continued to require substantial labor, consistent with research emphasizing that high-quality online course design requires intentional planning and iterative development (Gamage et al., 2020). Participants also echoed concerns raised in prior studies about limited institutional support and competing professional demands constraining instructional innovation (Nokkala et al., 2023; Gonzales et al., 2023). These findings suggest that long-term instructional transformation depends not solely on faculty willingness but on structural capacity within institutions. In this way, the durability of instructional change appears closely tied to realistic workload expectations and sustained institutional support rather than to crisis-induced experimentation alone.

Connection to the Research Question. These findings directly address Research Question 3: What barriers have faculty identified in the transition to and implementation of creating online course content? Across interviews, time constraints and increased workload emerged as recurring barriers to meaningful online and hybrid course redesign. Participants described the initial transition to ERT as requiring extensive labor in a compressed timeframe, including converting materials, redesigning assessments, learning unfamiliar technologies, and responding to expanded student communication. Even after instructional modalities stabilized, faculty noted that high-quality online or hybrid redesign required significant upfront planning and iterative revision. For many, the challenge was not willingness to adapt, but limited time and competing professional responsibilities that constrained sustained redesign efforts.

Importantly, these barriers shaped not only whether change occurred, but the depth and durability of that change. Faculty who reported having time to revise courses incrementally over

multiple semesters described more comprehensive and sustained redesign. In contrast, instructors who faced ongoing workload pressures were more likely to implement changes at a functional level or revert to familiar practices once immediate pressures eased. These patterns suggest that structural capacity, such as realistic workload expectations, institutional clarity, and sustained support, played a determining role in how instructional adaptation unfolded. Together, this theme underscores that faculty adaptation was not solely a matter of motivation or individual resilience. Rather, institutional structures significantly influenced how quickly, deeply, and sustainably instructors were able to redesign their courses. These findings highlight the importance of institutional policies that recognize the labor-intensive nature of online and hybrid course development when seeking long-term instructional transformation. Across interviews, time constraints and increased workload emerged as recurring barriers to meaningful online and hybrid course redesign.

Theme 4: Facilitators Supporting Effective Teaching Practices

Institutional support and communication emerged as primary facilitators shaping how faculty adapted their teaching during and after the COVID-19 pandemic. Faculty described early communication as frequent but often difficult to navigate, shaped by rapidly changing guidance and ongoing uncertainty. While most understood why decisions needed to be centralized during the initial emergency, many still felt unsure about expectations and how to prioritize their instructional efforts. Administrators echoed this perspective, noting that early communication was largely reactive and focused on keeping courses running rather than on longer-term instructional considerations. As the pandemic continued, both faculty and administrators described communication becoming clearer and more coordinated. This shift helped reduce uncertainty and allowed faculty to make more informed and confident instructional decisions.

Over time, institutional support shifted toward models that were more structured and responsive to faculty needs. Faculty described having greater access to support that helped them think more intentionally about course design rather than simply managing day-to-day challenges. This included support that allowed instructors to ask questions, experiment, and refine their approaches over multiple terms. Administrators described parallel efforts to improve communication and clarify expectations while still allowing flexibility in how faculty approached instruction. Rather than suggesting or mandating specific teaching methods, institutional support increasingly focused on enabling faculty to make decisions that fit their courses and students. At the same time, both faculty and administrators acknowledged that access to support varied across units, shaped by differences in local leadership, available resources, and instructional infrastructure. These variations influenced how easily faculty were able to adapt and sustain changes in their teaching, highlighting the importance of institutional context in shaping instructional change.

Connections to Theoretical Frameworks. From an SDT perspective (Deci & Ryan, 1991), institutional communication and support structures can be understood as shaping the psychological conditions necessary for sustained motivation, specifically autonomy (control over instructional decisions), competence (confidence in one's effectiveness), and relatedness (connection to others). During the early months of ERT, centralized decision-making and rapidly changing policies limited faculty autonomy, as instructors had little discretion over modality, attendance expectations, or assessment flexibility. Faculty described uncertainty about what was required and frustration with inconsistent messaging, conditions that constrained intrinsic motivation. As institutional communication stabilized in Fall 2020 and beyond, faculty reported greater freedom to make instructional choices aligned with their teaching philosophies and

course goals. Access to instructional design support and targeted training strengthened competence by helping faculty feel capable in online and hybrid environments. Opportunities for peer collaboration and shared problem-solving supported relatedness, reducing isolation and reinforcing a sense of collective effort. Interpreted through SDT, institutional clarity and support functioned to restore the psychological needs that underlie sustained engagement.

Institutional support also shaped faculty technology adoption in ways consistent with TAM (Davis, 1989), which proposes that technology use is influenced by perceived usefulness and perceived ease of use. Faculty described being more willing to integrate digital tools when institutional communication clarified expectations and reduced ambiguity about how those tools should be used. Training and responsive troubleshooting increased perceptions that technology was manageable, while visible improvements in course organization and communication strengthened perceptions of usefulness. When these two perceptions increased simultaneously, faculty were more likely to sustain technology use beyond the emergency context. However, where institutional support was inconsistent or difficult to access, faculty were more likely to limit technology adoption to minimal or functional use. TAM therefore helps explain not only continued adoption, but also variation in sustained integration.

Finally, institutional environments influenced teaching self-efficacy, defined by Bandura (1997) as individuals' beliefs in their capability to organize and execute actions required to achieve desired outcomes. Faculty described feeling more confident when institutional structures allowed time for experimentation, acknowledged learning curves, and framed instructional challenges as developmental rather than evaluative. These conditions created opportunities for mastery experiences, which Bandura identifies as the strongest source of self-efficacy development. Administrators similarly noted that faculty were more willing to try new

instructional approaches when expectations were clear and support systems were visible. Rather than viewing technology integration or course redesign as high-risk tasks, faculty who experienced consistent support described feeling capable of navigating instructional challenges across modalities. Taken together, these findings suggest that institutional environments did not merely provide resources; they shaped the motivational and efficacy beliefs that influenced whether instructional change was sustained.

Connections to Literature. Existing literature consistently emphasizes the importance of institutional support and clear communication during periods of instructional change (Hodges et al., 2020; Nokkala et al., 2023). Prior research has shown that when faculty have access to meaningful support, they are better positioned to adapt their teaching practices, particularly in online environments and during rapid shifts in instructional delivery (Hodges et al., 2020; Solberg & Tømte, 2023). Faculty experiences in this study align with that work, especially in how inconsistent communication and uneven access to support created challenges early in the pandemic. Participants described uncertainty during this period as a source of added stress that made it harder to move beyond short-term fixes and engage in deeper instructional redesign. These findings reinforce existing scholarship suggesting that institutional conditions function as critical facilitators of instructional adaptation when communication, clarity, and support are present (Nokkala et al., 2023; Gonzales et al., 2023).

At the same time, this study extends existing research by illustrating how institutional support changed as the pandemic progressed. Faculty and administrators described a shift away from ERT toward more sustainable forms of support focused on longer-term instructional improvement. Rather than simply responding to immediate needs, institutional efforts increasingly aimed to create conditions that supported continued learning and refinement of

teaching practices. These findings highlight the role of institutions not only in managing emergencies, but also in shaping the environments that support lasting instructional change. In this study, institutional support emerged as a key factor influencing faculty confidence and their willingness to continue teaching in online and hybrid formats.

Connection to the Research Question. These findings address the Research Question 4, What facilitators have faculty identified in the transition to and implementation of creating online course content, by examining the factors that shaped faculty adaptation following the COVID-19 pandemic. Faculty responses make clear that institutional support and communication were central to how instructors navigated instructional change over time. Participants described being better able to adapt and refine their teaching when expectations were clearly communicated and support was visible. When guidance was inconsistent or resources were difficult to access, faculty described spending more time managing uncertainty than focusing on instructional improvement. In contrast, clearer institutional direction helped faculty move beyond short-term problem solving and toward more intentional teaching practices.

Overall, the findings suggest that the institutional environment plays an important role in determining whether instructional changes are temporary or sustained. Faculty adaptation was more likely to continue when institutional support emphasized ongoing learning rather than short-term responses to disruption. When support was consistent, instructional changes felt more manageable over time. Faculty described being more willing to maintain new approaches when they felt those changes fit realistically within their workload. In contrast, changes introduced without continued support were more likely to fade once immediate pressures eased. Together,

these patterns highlight how institutional conditions shape the longevity of instructional change beyond the immediate crisis.

Faculty described adapting most effectively when institutional environments allowed for flexibility and professional judgment. Rather than feeling pressured to adopt specific approaches, instructors valued support that enabled them to make decisions based on their courses, students, and teaching goals. Over time, this flexibility contributed to a greater sense of confidence and investment in instructional change. The findings highlight how institutional conditions can either support or constrain faculty willingness to continue evolving their teaching. Taken together, this theme underscores the central role institutions play in shaping post-pandemic instructional practices and supporting long-term instructional change.

Theme 5: Long-Term Pedagogical Shifts and Future Directions in Higher Education

Faculty described lasting changes in how they viewed both teaching and their professional roles following the COVID-19 pandemic. Many reflected on how the experience challenged long-held assumptions about what effective instruction looks like and how it should be delivered. Teaching was no longer described primarily in terms of modality, but in terms of adaptability and responsiveness to students across different situations. Faculty spoke about becoming more open to adjusting their approaches as conditions changed. Over time, these shifts reshaped how instructors defined effective teaching. Rather than focusing on a single format or method, effective teaching was described as something flexible, reflective, and responsive to student needs.

Faculty also described changes in how they understood themselves as educators, particularly in relation to technology use and instructional design. Many no longer saw

themselves as inexperienced or hesitant users of educational technology, but as instructors who could navigate different modalities with greater confidence. Administrators echoed these observations, noting increased comfort with experimentation and a greater willingness to rethink course design. These shifts in professional identity were described as developing gradually through repeated teaching experiences rather than through formal training alone. Faculty and administrators alike emphasized that confidence grew over time as instructors saw what they were capable of doing. Taken together, these perspectives suggest that the pandemic had a lasting influence on how faculty understood their roles and responsibilities as educators. These shifts also indicate that adaptability, digital fluency, and instructional flexibility may remain embedded expectations within higher education moving forward, rather than temporary adjustments tied solely to crisis conditions.

Connections to Theoretical Frameworks. From a SDT perspective, shifts in professional identity can be understood as developing alongside increased experiences of autonomy and competence over time. As instructors moved away from crisis-driven decisions and regained control over instructional choices, many described a renewed sense of ownership in their teaching. Autonomy shifted from reacting to rapidly changing mandates to exercising professional judgment aligned with personal teaching values. Simultaneously, growing competence emerged through repeated cycles of experimentation and refinement in online and hybrid environments. Faculty narratives suggest that identity development was not tied to mastering a single tool, but to developing confidence in their ability to adapt across contexts. These experiences supported a more integrated professional identity grounded in capability and intentionality.

TAM further clarifies how identity shifts were connected to changing perceptions of technology use. Early in the pandemic, instructional technology was often associated with stress and emergency compliance. As faculty gained experience and institutional support stabilized, perceptions of usefulness and ease of use evolved. When technology was experienced as manageable and aligned with instructional goals, it became integrated into routine decision-making rather than viewed as an external imposition. This perceptual shift reduced resistance and allowed technological competence to become part of faculty self-understanding rather than a temporary survival skill.

Teaching self-efficacy also played a central role in this identity development. Drawing on Bandura's framework, repeated mastery experiences, such as successfully redesigning assessments or managing hybrid discussions, reinforced faculty beliefs in their instructional capabilities. As confidence increased, faculty described greater openness to experimentation and instructional risk-taking. Rather than striving for perfection, many framed teaching as iterative and adaptable. Administrators observed similar patterns, noting that instructors were more willing to try new approaches when they believed they could adjust if needed. Together, these conditions contributed to a more resilient professional identity positioned for continued evolution beyond the immediate pandemic context.

Connections to Literature. Research on faculty identity and instructional change emphasizes that sustained pedagogical transformation is often accompanied by shifts in professional beliefs and self-understanding. Scholars examining instructional change argue that new practices become durable when they are integrated into faculty identity rather than adopted as temporary strategies (e.g., Ten Cate et al., 2011; Stupnisky et al., 2018). Faculty responses in this study reflect similar patterns. Participants did not describe online or hybrid teaching as a

temporary deviation from “real” instruction, but as increasingly integrated components of their overall teaching philosophies. Over time, digital tools and flexible strategies became associated with intentional instructional decision-making rather than emergency response. These findings reinforce existing scholarship suggesting that lasting pedagogical change occurs when instructors reinterpret their professional roles in light of new practices.

Faculty reflections also align with research indicating that identity development often occurs through iterative practice rather than isolated training events (Tschannen-Moran & McMaster, 2009). Participants described learning by doing, refining instructional approaches across multiple semesters as they observed student outcomes and adjusted accordingly. This gradual process mirrors literature emphasizing the importance of mastery experiences and experiential learning in sustaining instructional change. Rather than simply adding technological tools to preexisting routines, faculty in this study described rethinking course structure, flexibility, and responsiveness. Professional identity, therefore, evolved alongside instructional practice rather than preceding it.

This study extends existing literature by illustrating how crisis-driven disruption can accelerate identity development under supportive conditions. While early pandemic scholarship often focused on burnout and disruption (Bozkurt et al., 2020; Watermeyer et al., 2021), these findings suggest that sustained engagement with new instructional challenges—particularly when institutional support and peer collaboration were present, can produce longer-term professional growth. Rather than permanently destabilizing faculty identity, the disruption functioned as a catalyst for reflection and expansion of instructional capacity. In this way, the study contributes to a more nuanced understanding of post-pandemic instructional change by

demonstrating that professional identity development may emerge not only despite disruption, but sometimes through it.

Connection to the Research Question. These findings directly address Research Question 1, which examined how faculty adapted their teaching methods in response to the transition to online teaching, and Research Question 2, which explored the teaching practices and technologies faculty adopted and how they perceived their effectiveness. Faculty narratives indicate that changes initiated during ERT continued to influence instructional planning, delivery, and reflection well beyond the initial disruption. Rather than reverting to pre-pandemic norms, many described sustained shifts toward flexibility, responsiveness, and intentional integration of technology across modalities. These adaptations were described as developmental and reflective rather than reactive.

This theme also contributes to Research Question 5, which examined what aspects of professional development were most effective in supporting faculty transition and enhancement of online and hybrid teaching. While faculty did not attribute identity shifts solely to formal training programs, they consistently emphasized the value of professional development structures that allowed time for experimentation, peer collaboration, and iterative refinement across multiple semesters. Informal problem-solving conversations, access to instructional design expertise, and ongoing rather than one-time training opportunities were described as particularly impactful. These forms of support helped faculty move beyond compliance-based technology use toward more integrated and confident instructional practice.

Together, these findings suggest that long-term pedagogical shifts were not driven by crisis conditions alone but were supported by accessible and practical professional learning opportunities. Faculty frequently described valuing just-in-time training, short tutorials, and

targeted sessions that allowed them to immediately implement what they learned in their own courses. Rather than relying solely on extended formal programs, instructors often built confidence incrementally by applying strategies across multiple semesters and expanding on their knowledge over time. In this way, professional development was most effective when it was timely, practical, and directly connected to instructional needs. These experiences suggest that sustained pedagogical growth was supported not only by reflection, but by opportunities to learn, apply, and refine teaching practices in real time.

5.2 summarizes the implications for different stakeholders in this study.

Figure 5.2

Summary of Implications for Practice

Stakeholder	Implications
Faculty	Maintain modular design; integrate technology; apply flexibility; prioritize communication
Instructional Designers	Provide hands-on PD; offer templates; sustain collaboration
Administrators	Support workload balance; improve communication; invest in infrastructure
Institutions	Build long-term online strategy; encourage innovation; embed accessibility

Implications for Faculty

Continued Use of Structured, Modular Course Design

Faculty consistently described structured, modular course design as a practice they planned to continue beyond the pandemic. Organizing courses into clear and predictable modules helped students better understand expectations and navigate course materials more confidently. Faculty noted that this structure supported student success across modalities, not just in fully online courses. Rather than seeing modular design as a temporary response to ERT, instructors described it as a practical improvement to their overall course organization. Faculty reported that clearer structure allowed them to communicate expectations more effectively and manage course

flow more intentionally. Over time, faculty came to view this approach as a foundational element of effective teaching.

From the faculty perspective, modular design also supported more sustainable teaching practices. Consistent patterns for assignments and assessments made courses easier to manage and revise over multiple terms. Faculty described being able to adjust content without having to rethink the entire course structure each time. While faculty did not explicitly frame these practices in terms of instructional design principles, the patterns described in their narratives align closely with long-standing guidance in the instructional design literature. The scale and urgency of ERT made the benefits of structured design more visible and harder to ignore. Taken together, these experiences suggest that the pandemic reinforced long-standing instructional design principles and accelerated their adoption in ways that may not have occurred otherwise.

Ongoing Integration of Digital Tools to Enhance Learning

The findings also point to the continued value of digital tools in supporting teaching and learning. Faculty described how expanded technology use during the pandemic shifted how they thought about the role of digital tools in their courses. Rather than viewing technology as something tied only to emergency conditions, many instructors began to see its longer-term usefulness for supporting explanation and communication. Faculty described being more intentional about when and how they used technology, focusing on what added value for students. These tools were often described as extending learning beyond scheduled class time rather than replacing it. Over time, technology became a more integrated and routine part of instructional practice.

Faculty also described how digital tools supported greater flexibility and responsiveness to student needs. Instructors noted that technology made it easier to identify when students were

struggling and to respond in a timely way. These practices were particularly helpful for students managing work, family responsibilities, or other competing demands. Faculty described being able to remain accessible to students without feeling overwhelmed by additional workload. Importantly, technology was not framed as a substitute for in-person interaction but as a complement to it. Continued integration of digital tools emerged as a way to support more adaptable and inclusive teaching practices moving forward.

Emphasis on Empathy and Flexibility

Faculty also described a lasting shift toward more empathetic and flexible teaching practices. During the pandemic, many instructors became more aware of the range of challenges students were managing outside the classroom. This increased awareness prompted faculty to reconsider how course policies affected student engagement and persistence. Rather than relying on rigid rules, instructors described making more thoughtful and context-sensitive decisions about deadlines and participation. Faculty noted that flexibility helped students remain engaged during periods of stress or uncertainty. Over time, these approaches became part of how many faculty thought about teaching more broadly.

Importantly, faculty did not describe flexibility as lowering academic standards. Instead, they framed it as a way to support meaningful learning while maintaining clear expectations. Faculty described these practices as particularly impactful for students balancing work, family, or other responsibilities. Empathy-informed teaching was viewed as strengthening motivation rather than diminishing rigor. Taken together, these findings suggest that flexibility and empathy are likely to remain important features of post-pandemic teaching practices.

Implications for Administrators

Balance Expectations with Adequate Support

The transition to online and hybrid instruction significantly expanded instructional labor, and sustaining high-quality course design requires structural alignment between expectations and capacity. Institutions must carefully examine how course redesign, accessibility requirements, and expanded student support expectations are balanced with workload realities. When instructional demands increase without corresponding adjustments to time, recognition, or institutional support, sustainability is compromised. Administrators should evaluate policies related to teaching load, course release options, and compensation structures to ensure that expanded instructional expectations are realistic and maintainable over time.

Supporting sustainable instructional change also requires reconsidering how teaching labor is recognized within evaluation and promotion systems. Course redesign extends beyond transferring content into digital formats; it involves iterative planning, assessment restructuring, and ongoing communication design. Administrative policies that formally acknowledge this labor, through adjusted workloads, recognition in review processes, or structured support models, can reduce burnout risk and reinforce the institutional value of high-quality teaching. Institutional leadership plays a central role in determining whether instructional innovation remains temporary or becomes embedded practice.

Provide Clear, Consistent Communication

Periods of rapid change underscore the central role administrative communication structures play in shaping instructional adaptation. When guidance lacks clarity, shifts without explanation, or is distributed across multiple channels without coordination, instructional planning becomes significantly more time-consuming and cognitively demanding. In such

conditions, instructors expend valuable time interpreting evolving expectations rather than refining course design. Institutions should prioritize centralized, transparent communication systems that provide not only directives but also context, rationale, and anticipated next steps. Early clarification regarding modality decisions, technology platforms, accessibility standards, and instructional policies enables faculty to plan proactively rather than operate under uncertainty.

Effective administrative communication also requires consistency and coherence over time. Clear timelines defined decision-making criteria, and identifiable points of contact reduce ambiguity and support instructional confidence. When instructors understand why decisions are being made and how long policies are expected to remain in place, they are better positioned to align course planning with institutional priorities. Conversely, fragmented or rapidly shifting messaging can increase uncertainty and undermine long-term instructional investment. Administrative leaders therefore play a critical role in creating communication systems that reduce confusion and promote stability during periods of change.

These communication practices influence more than operational efficiency; they shape professional trust and engagement. Transparent and predictable communication supports faculty autonomy by reducing guesswork and enabling informed decision-making, and it reinforces competence by clarifying expectations. In this way, communication structures directly contribute to the psychological conditions that sustain motivation, consistent with SDT. Institutions that establish reliable and coherent communication channels are more likely to support sustained instructional improvement rather than short-term compliance driven by urgency. Over time, communication practices become part of the institutional culture surrounding teaching and signal the value placed on thoughtful instructional planning.

Invest in Sustainable Technology Infrastructure

Reliable technology infrastructure is foundational to sustained instructional change. Effective online and hybrid teaching depends not only on individual faculty skill, but on institutional systems that function predictably and equitably across departments. Administrative investment in standardized hardware, supported software platforms, secure connectivity, and accessible learning management systems reduces variability and lowers the burden on individual instructors to troubleshoot or develop workarounds. When tools differ widely across units or lack consistent support, faculty expend time solving technical problems rather than refining pedagogy. Long-term infrastructure planning should therefore prioritize consistency, interoperability, and equitable access so that instructional innovation is not constrained by technological instability.

Infrastructure decisions also influence the sustainability of instructional practices. Faculty are more likely to integrate digital tools into routine course planning when those tools are reliably available, institutionally supported, and aligned with campus-wide standards. Standardization reduces the cognitive load associated with platform switching and informal problem-solving, allowing instructors to focus on instructional design rather than technical management. Administrative decisions regarding platform adoption, accessibility compliance tools, video hosting solutions, and technical support models directly shape whether technology becomes normalized within teaching practice or remains perceived as an added burden layered onto existing responsibilities.

From the perspective of the TAM, perceptions of usefulness and ease of use are influenced not only by the tool itself but by the surrounding support environment. When infrastructure is stable and assistance is timely, faculty are more likely to view technology as

manageable and instructionally valuable. Conversely, unreliable systems or fragmented support structures can undermine adoption even when pedagogical potential exists. Sustained instructional change therefore depends on infrastructure decisions made at the administrative level. Institutional investment in reliable, scalable, and accessible technology ecosystems signals that digital teaching is not a temporary accommodation, but an integrated and supported component of the university's instructional mission.

Implications for Instructional Designers and Support Units

Expand Access to On-Demand, Practical Training

Faculty described benefiting most from professional development that connected directly to the realities of their day-to-day teaching. Rather than abstract or theory-heavy sessions, instructors valued opportunities to learn by doing and to apply new strategies immediately in their courses. Training that focused on problem-solving helped faculty address real instructional questions as they arose, particularly when navigating unfamiliar tools or course formats. Faculty described being more likely to engage with professional development when it felt relevant to current teaching challenges. Timing also mattered, as instructors appreciated support they could access when they were ready to use it. These experiences suggest that relevance and immediacy play a key role in whether professional development translates into instructional change.

These findings point to the continued value of modular, self-paced training opportunities. Instructional designers are well positioned to support this work by developing resources that faculty can access as needs emerge rather than at fixed points in the semester. On-demand formats allow instructors to revisit content as their teaching evolves and to engage with material at their own pace. Faculty described appreciating the ability to return to training when preparing

for a new course or revising an existing one. This approach acknowledges that instructional learning is ongoing rather than tied to a single workshop. Continued investment in practical, flexible training can support sustained instructional growth over time.

Maintain Collaborative Design Partnerships

Faculty repeatedly emphasized the value of working in partnership with instructional designers. These collaborations helped instructors feel supported as they navigated course design decisions and instructional challenges. Faculty described partnerships as spaces for dialogue rather than direction, where ideas could be explored and refined through conversation. Having a consistent design partner contributed to greater confidence and reduced the sense of isolation some instructors experienced during instructional change. Faculty noted that these relationships made it easier to ask questions and test new ideas. Over time, collaborative partnerships became an important source of encouragement and accountability.

Maintaining collaborative design models can continue to strengthen both course quality and faculty confidence. Faculty described one-on-one consultations as especially valuable because support was tailored to their specific teaching contexts. Structured design processes provided space for reflection rather than rushed decision-making. These interactions helped faculty think more intentionally about instructional choices and how those choices aligned with student needs. Over time, partnerships supported deeper engagement with course design rather than surface-level adjustments. These findings highlight the importance of sustained, relationship-based support between faculty and instructional designers.

Create Shared Resource Libraries

Faculty also described the value of shared instructional resources that reduced the need to start from scratch. Access to templates, exemplars, and reusable design elements helped

instructors adopt effective structures more efficiently. Faculty noted that having models to draw from made course design feel more manageable, particularly when working under time constraints. These resources also helped instructors visualize what effective course organization could look like. Faculty described shared materials as lowering barriers to instructional change. This support was especially helpful for instructors redesigning courses for new modalities.

Beyond efficiency, shared resource libraries contributed to a sense of coherence across courses and programs. Faculty described feeling more confident when using materials that reflected established practices and institutional expectations. Reusable resources also reduced workload, allowing instructors to focus more on teaching and student interaction. Over time, these repositories supported greater consistency in student learning experiences. Faculty noted that shared resources made instructional quality feel more attainable rather than overwhelming. Taken together, these findings suggest that shared instructional resources play a meaningful role in sustaining high-quality teaching practices.

Implications for Institutions

Develop Long-Term Strategies for Online and Hybrid Instruction

The pandemic accelerated institutional movement toward online and hybrid instruction, shifting these modalities from temporary solutions to enduring components of higher education. Faculty and administrators alike described the need to move beyond crisis responses toward more intentional planning. Short-term fixes that were effective during the crisis were not always sustainable over time. Participants emphasized that clearer expectations around quality online instruction helped faculty plan more effectively. When guidance was inconsistent or temporary,

instructional decisions felt more reactive than strategic. These experiences point to the importance of long-term planning that reflects the ongoing role of online and hybrid teaching.

Developing sustainable strategies also requires attention to how instructional support is resourced and maintained. Faculty described professional development as most effective when it was part of a coherent pathway rather than a series of disconnected offerings. Ongoing access to instructional design support helped instructors refine courses over time rather than relying on one-time redesign efforts. Institutions that embedded this support into long-term planning were better positioned to sustain instructional quality. These approaches acknowledge that effective online and hybrid teaching requires continued investment. Taken together, the findings suggest that strategic planning is essential for supporting instructional change beyond the pandemic conditions.

Promote a Culture of Innovation and Collegial Support

Institutions play a central role in cultivating cultures that sustain instructional innovation and collegial support. Rather than relying on informal exchanges or individual initiative, institutions should intentionally create structured opportunities for collaboration, such as learning communities, peer mentoring models, cross-disciplinary forums, and regular teaching showcases. When these spaces are formally supported and recognized, instructional improvement becomes a shared responsibility rather than an isolated effort. Leadership decisions regarding workload allocation, recognition systems, and visible endorsement of collaborative practice signal whether innovation is valued as core academic work or treated as optional. Embedding collaboration into institutional structures increases the likelihood that experimentation and instructional refinement will persist beyond periods of crisis.

Promoting a culture of collegial engagement also strengthens professional belonging and sustained motivation. Institutions that normalize dialogue about teaching, create psychologically safe environments for sharing challenges, and highlight effective practices foster conditions in which experimentation feels manageable rather than risky. These environments support relatedness and intrinsic motivation, aligning with principles of SDT, while also reinforcing organizational resilience. When collaboration is institutionally supported rather than dependent on informal networks, it becomes a strategic investment in long-term instructional growth rather than a temporary response to disruption.

Prioritize Accessibility and Inclusive Design.

Post-pandemic instructional shifts revealed increased attention to accessibility and inclusive course design, signaling an important area for sustained institutional focus. Institutions should treat accessibility not as a compliance requirement alone, but as a core dimension of instructional quality. The heightened awareness that emerged during online and hybrid instruction demonstrated how course structure, content format, and communication practices directly affect student access to learning. To sustain these gains, institutions must embed inclusive design principles into long-term instructional strategy rather than relying on individual initiative.

Institutional leadership plays a critical role in normalizing accessibility practices across departments. Providing structured training on inclusive design, ensuring consistent access to captioning and content review tools, and integrating accessibility expectations into course and program review processes create clarity and consistency. When accessibility standards are embedded within institutional systems, expectations become transparent and sustainable rather than reactive. Prioritizing inclusive design strengthens institutional capacity to meet evolving

instructional, technological, and compliance demands while reinforcing a commitment to equitable learning environments.

Recommendations for Future Research

Based on the findings of this study, several directions for future research emerge related to faculty adaptation, online and hybrid teaching, and the institutional conditions that shape instructional change in higher education. The experiences shared by faculty suggest that the COVID-19 pandemic marked not a single moment of disruption, but the beginning of a longer period of instructional evolution. While this study offers insight into how faculty navigated that transition and made sense of their teaching several years later, it also raises important questions about what persists, what continues to shift, and what may eventually fade. Future research is needed to better understand the long-term instructional, motivational, and technological changes that originated during the pandemic and continue to influence faculty practice, professional identity, and institutional approaches to teaching and learning.

Future research would benefit from taking a more clearly longitudinal view of faculty teaching practices. While this study captured faculty reflections several years after the onset of the COVID-19 pandemic, it represents only one point in an ongoing process of adaptation. As the immediate pressures of the pandemic continue to fade, additional long-term studies could examine how teaching practices evolve in more stable conditions. An important question moving forward is whether the flexibility, technology use, and redesigned assessments that emerged during ERT become lasting features of instruction or gradually recede as institutional expectations normalize. Longitudinal research could also account for broader influences, such as enrollment fluctuations, new instructional technologies, and shifting institutional or accreditation requirements, that continue to shape faculty decision-making. Taken

together, this work would help clarify whether pandemic-era changes represent temporary responses or more enduring shifts in how faculty understand and enact their teaching roles.

Although this study focused on faculty experiences, incorporating student perspectives would offer a valuable and necessary complement. Understanding how students experience post-pandemic teaching practices, particularly modular course designs, expanded use of digital tools, and more flexible policies, could provide important context for interpreting faculty adaptation. Future research might explore whether these instructional changes support student motivation, autonomy, and learning in ways that align with faculty intentions, or whether gaps exist between instructional design and student experience. Examining differences across learning modalities or student populations would further strengthen this line of inquiry. Bringing student voices into the conversation would help determine whether post-pandemic instructional changes are meeting learner needs or unintentionally creating new challenges.

The findings also highlight the significant role instructional designers played in supporting faculty during and after the transition to remote and hybrid teaching. Future research could explore how different forms of collaboration between faculty and instructional designers influence instructional confidence, technology use, and sustained pedagogical change. Of particular interest is how these partnerships evolve and how institutional structures either support or limit their effectiveness. Examining how instructional design roles are positioned within institutions may shed light on their long-term impact and strategic value. This line of research would contribute to ongoing efforts to better understand instructional designers as integral partners in teaching and learning, rather than as solely technical support.

Another area warranting further exploration is institutional communication and policy development during periods of rapid change. Faculty in this study frequently described

challenges related to unclear, inconsistent, or frequently changing guidance, especially early in the pandemic. Future studies could examine how institutions make and communicate instructional decisions during crises and how those communication strategies influence faculty autonomy, confidence, and instructional effectiveness. Understanding what supports faculty best during periods of uncertainty may help institutions respond more effectively to future disruptions and reduce unnecessary strain on instructors.

Finally, expanding this work beyond a single institutional context would strengthen the broader applicability of these findings. While this case study offered depth and nuance, comparative research across institutions could help determine whether the patterns observed here reflect wider trends in higher education. Multi-institutional case studies or broader survey-based research could surface commonalities and differences in faculty adaptation across disciplines, institution types, and geographic contexts. Such work would contribute to a more comprehensive understanding of post-pandemic instructional change across the higher education landscape.

Summary

This chapter interpreted the findings of the study through the lenses of SDT, the TAM, and teaching self-efficacy, while also situating those findings within the broader literature on online and hybrid teaching. Rather than presenting faculty experiences as isolated or short-term responses to the COVID-19 pandemic, the findings point to deeper and more enduring shifts in how faculty approach teaching. Participants described changes that extended beyond tools or modalities and instead reflected evolving beliefs about instruction, student engagement, and their own professional identities. These shifts suggest that the pandemic functioned as a catalyst rather than a temporary disruption. In many cases, faculty used the constraints of the moment as an

opportunity to rethink long-standing practices. As a result, post-pandemic teaching emerged as more intentional, reflective, and grounded in student-centered design.

Faculty adaptation throughout this period was not linear or uniform, but instead unfolded over time through experimentation, reflection, and increased confidence. Early instructional decisions were often driven by urgency and necessity, particularly during ERT. As faculty gained experience and access to support, their approaches became more deliberate and aligned with their instructional goals. Many described a growing sense of autonomy and competence as they learned what worked for their courses and students. Technology shifted from being perceived as a barrier to becoming a purposeful instructional tool. This progression was closely tied to increased teaching self-efficacy, as faculty developed trust in their ability to navigate new modalities effectively.

Despite this growth, faculty also faced ongoing challenges that shaped their experiences. Increased workload, inconsistent student engagement, and periods of unclear institutional communication created tension and fatigue for many instructors. Access to technology and student readiness varied widely, requiring faculty to remain flexible and responsive. Even so, participants described finding ways to sustain instructional quality through collaboration and support. Instructional designers, peer networks, and professional development opportunities played an important role in helping faculty refine their courses. These supports enabled instructors to develop teaching practices that felt more structured, accessible, and human, even within complex instructional environments.

One of the most significant findings of this study is that online and hybrid practices have become embedded within mainstream instruction rather than remaining stopgap measures. Faculty continued to use modular course structures, digital communication tools, and flexible

approaches to assessment well beyond the initial ERT period. These practices were often retained because they supported clearer organization, stronger feedback, and improved student access. Rather than viewing modality as a defining feature of a course, faculty described focusing more on how students interacted with content and each other. This shift reflects a broader cultural change within higher education toward adaptability and responsiveness. Teaching, in this context, became less about delivery and more about design and connection.

The findings of this study also carry important implications for institutional practice and future research. Faculty experiences highlight the need for sustained investment in professional development and instructional support that extends beyond times of crisis. Institutions play a critical role in shaping whether instructional change is supported, valued, and sustained over time. Future research can build on this work by examining how these adaptations continue to evolve, how students experience post-pandemic instructional practices, and how institutional structures influence long-term change. Together, these areas of inquiry can deepen understanding of how faculty navigate ongoing shifts in higher education. Ultimately, this study contributes to a growing body of evidence that meaningful instructional change is possible when faculty are supported, trusted, and given space to adapt thoughtfully.

Generative AI tools were used in a limited capacity for editorial refinement and language clarity. All research design, analysis, interpretation, and scholarly conclusions were independently conducted by the author.

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Appendix A - Participation Request Correspondence

Department Head Email

Subject: **Request for Faculty Participation in Research Study on Teaching Post-COVID-19**

Dear [Department Head's Name],

I am requesting your assistance in identifying faculty members who may be interested in participating in a research study I am conducting on Faculty Adaptation to Online and Hybrid Teaching Post-COVID-19.

The study seeks to explore how faculty members have adapted their course content delivery and teaching methods in response to the transition to online and hybrid formats. I am particularly interested in speaking with faculty who taught before and after the pandemic and have experience integrating educational technologies or modifying their teaching practices during this period. Additionally, it would be valuable to include participants both with and without prior experience with online teaching before being required to shift to emergency remote teaching due to the pandemic.

If you know any faculty members in your department who meet these criteria and would be willing to share their experiences, I would greatly appreciate it if you could provide me with their names or encourage them to contact me directly. Participation in the study will involve a one-hour, semi-structured interview, and all responses will remain confidential and anonymous. It will also include a document analysis of syllabi from courses taught before and after the pandemic.

Thank you in advance for your support in identifying potential participants. Please let me know if you have any questions or want further information about the study.

Online Course Design Institute Participant Email

Subject: Invitation to Participate in Research Study on Online and Hybrid Teaching Post-COVID-19

Greetings,

I hope this email finds you well. You are being invited to participate in my research study on Faculty Adaptation to Online and Hybrid Teaching Post-COVID-19 because you enrolled in the Online Course Design Institute (OCDI) offered by the Teaching and Learning Center (TLC) and Global Campus in 2020.

This study aims to explore how faculty have adapted their course content delivery and teaching methods in response to the transition to online and hybrid formats. I am particularly interested in the experiences of faculty who taught both before and after the pandemic. Participation in the study would involve a one-hour, semi-structured interview to discuss your experiences with online and hybrid teaching.

Additionally, I am conducting a document analysis of syllabi from courses taught before and after the pandemic to examine how course design and instructional strategies have evolved. All responses will be kept confidential and anonymous.

I would greatly appreciate the opportunity to speak with you and learn from your insights. If you are willing to participate or have any questions, please reply to this email. I am happy to coordinate a time that works best for your schedule.

Thank you for considering this request.

Administrator Invitation Email

Subject: Invitation to Participate in Research Study on Online and Hybrid Teaching Post-COVID-19

Greetings,

I hope this email finds you well. I am reaching out to invite you to participate in my research study on Institutional Responses to Faculty Adaptation to Online and Hybrid Teaching Post-COVID-19.

This study seeks to explore the administrative decision-making processes, faculty support strategies, and institutional challenges encountered during and after the transition to online and hybrid teaching. Your insights as an administrator will be invaluable in understanding how institutions navigated these changes, supported faculty, and adapted policies in response to the pandemic.

Participation in the study would involve a one-hour, semi-structured interview, where we will discuss your experiences and perspectives on these topics. All responses will remain confidential and anonymous.

I would greatly appreciate the opportunity to speak with you and learn from your expertise. If you are willing to participate or have any questions, please feel free to reply to this email. I am happy to coordinate a time that works best for you.

Thank you for considering this request. I truly appreciate your time and valuable perspective.

Department Head Suggestion Email

Subject: Invitation to Participate in Research Study on Online and Hybrid Teaching Post-COVID-19

I hope this email finds you well. Your department head, *insert name here* recommended you as a faculty member who may be interested in participating in my research study on Faculty Adaptation to Online and Hybrid Teaching Post-COVID-19.

This study aims to explore how faculty have adapted their course content delivery and teaching methods in response to the transition to online and hybrid formats. I am particularly interested in the experiences of faculty who taught both before and after the pandemic, including those who had prior online teaching experience and those who had to adjust rapidly to emergency remote instruction.

Participation in the study would involve a one-hour, semi-structured interview, where we will discuss your experiences with online and hybrid teaching. Additionally, I am conducting a document analysis of syllabi from courses taught before and after the pandemic to understand how course design and instructional strategies have evolved. All responses will remain confidential and anonymous.

I would greatly appreciate the opportunity to speak with you and learn from your insights. If you are willing to participate or have any questions, please feel free to reply to this email. I am happy to coordinate a time that works best for you.

Thank you for considering this request. I truly appreciate your time and expertise.

Colleague Participation Email

Subject: Request for Faculty Participation in Research Study on Teaching Post-COVID-19

Dear [Faculty Name],

I hope this message finds you well. I'm reaching out to request your assistance in identifying colleagues who might be interested in participating in a research study I'm conducting on *Faculty Adaptation to Online and Hybrid Teaching Post-COVID-19*.

The study aims to explore how faculty have adapted their teaching methods and course content for online and hybrid formats in response to the pandemic. I'm particularly interested in speaking with faculty who taught both before and after the transition and have either integrated educational technologies or adjusted their teaching practices as part of this shift. Additionally, I would like to include perspectives from those with prior experience in online teaching, as well as those who were new to it due to emergency remote teaching.

If you have colleagues who meet these criteria and may be open to sharing their experiences, I would greatly appreciate it if you could either share their names with me or encourage them to contact me directly. Participation will involve a one-hour, semi-structured interview, with all responses kept confidential and anonymous.

Thank you very much for your support in identifying potential participants. Please feel free to reach out if you have any questions or would like more details about the study.

Best regards,

Lisa Shappee

Doctoral Candidate

785-576-2212

Appendix B - Structured Interview Questions

Thank you for taking the time to participate in this interview . Today, we will be discussing your thoughts for a study on faculty adaptation to online and hybrid teaching in the post-COVID-19 era. You were selected for this interview because of your experience teaching both before and after the pandemic, and your insights will be valuable in understanding the transition to online instruction and the changes made to your course content. Your participation will remain anonymous, and any statements you make during the interview will be kept confidential. The session will last approximately one hour.

As a reminder, this interview will be recorded and transcribed verbatim by me. You are free to end the interview any time and may skip any questions you are uncomfortable answering.

1. Adapting to Remote Teaching:

- Can you describe your initial experiences when you had to transition to remote teaching due to the COVID-19 pandemic?
- What were the biggest challenges you faced during this transition?
- How did your teaching practices evolve as you adjusted to online or hybrid formats?

2. Teaching Methods and Tools:

- What teaching methods or tools did you find most effective during remote or hybrid teaching?
- Were there any teaching strategies or technologies you adopted during the pandemic that you continue to use?

- How did you modify your course content or instructional materials to better fit the online or hybrid format?
- How did you adjust your teaching strategies to maintain or improve student engagement?

3. Support and Professional Development:

- How would you describe the level of institutional support you received during the transition to remote teaching?
- Did you participate in any professional development related to online teaching? If so, how did it impact your teaching?
- What additional support or resources would help you stay actively engaged in professional development to remain current with educational technologies and emerging teaching trends?

4. Motivation and Long-Term Impact:

- How did the transition to remote teaching affect your motivation and engagement with teaching?
- In what ways do you feel your teaching approach has permanently changed since the pandemic?
- Looking ahead, what elements of your current teaching practice would you like to retain or improve?

5. Barriers and Facilitators:

- What were the main barriers you encountered in adopting online or hybrid teaching?
- Were there any facilitators, such as technologies, strategies, or institutional practices, that helped ease the transition?

6. Future of Online and Hybrid Teaching:

- How do you view the future of online and hybrid teaching at your institution?
- What would you recommend to other faculty or the administration to improve the online and hybrid teaching experience?

Appendix C - Syllabus Analysis Tool

Initial Syllabus Analysis Tool

Syllabus Details

- **Course Title:** _____
- **#:** _____
- **Semester:** _____

Step 1: Organize Syllabus Information

Group (Check one):

- ☐ Before COVID-19 (Baseline)
- ☐ After Shift to Online/Hybrid

Step 2: Analysis Categories

Course Objectives and Learning Outcomes

1. List any changes in course objectives or learning outcomes:
2. Describe any shift toward skills or knowledge areas related to remote learning (e.g., digital literacy, independent learning):

Instructional Methods and Delivery

1. Describe changes from in-person to online/hybrid formats (if applicable):
2. List any new tools, platforms, or digital resources included in the syllabus (e.g., video lectures, interactive software):
3. Identify any mention of asynchronous vs. synchronous content delivery methods:

Assessment and Evaluation Methods

1. Describe any modified assessment strategies (e.g., from exams to project-based assessments):
2. Indicate if grading policies or feedback mechanisms were adapted for remote assessment needs:

Course Communication

1. Changes in communication preferences for students contacting them
2. Changes in Office Hours

Step 3: Coding and Thematic Analysis

1. Open Coding: Identify and record key instructional changes, language shifts, policy modifications, technology integrations, and structural adjustments reflected in the syllabus. Note recurring terminology or descriptions related to instructional delivery, flexibility, communication, assessment practices, or modality changes.
2. Axial Coding: Group related open codes into broader conceptual categories (e.g., instructional flexibility, assessment redesign, digital tool integration, communication structures, modality adjustments). Examine relationships among categories to determine how they collectively represent patterns of instructional adaptation.
3. Thematic Analysis: Identify overarching patterns that emerge across syllabi. Note how documented changes reflect evolving instructional practices, sustained adaptations, or shifts in course design priorities during and after the transition to online and hybrid teaching.

Appendix D - Debriefing Statement

Subject: Research Study Debrief

Dear [Participant's Name],

Thank you for participating in my study on Faculty Adaptation to Online and Hybrid Teaching Post-COVID-19. Your insights and experiences are extremely valuable in helping to understand the impact of these changes on teaching practices, particularly in light of the pandemic's influence.

This study aims to explore how educators adapted their use of educational technologies, how they redesigned their courses, and what challenges and opportunities they encountered during this shift. By gathering input from a wide range of faculty, the hope is to identify best practices and provide recommendations for improving future teaching strategies in online and hybrid environments.

Your participation and that of other faculty members will contribute to a broader understanding of how educational delivery can evolve to meet the needs of diverse student populations in various learning formats. All information you provided will remain confidential, and your identity will not be associated with your responses in any publications or reports that result from this research.

If you have any questions about the study or if you would like to receive a summary of the findings, please feel free to reach out. Once again, thank you for your valuable time and contribution to this important research.

Best regards,

Lisa Shappee
Doctoral Candidate
785-576-2212

Appendix E - Consent Form

Consent

Title of the Project: Exploring Faculty Adaptation to Course Content Creation Post-COVID-19: Perceptions, Challenges, and Best Practices for Higher Education

Principal Investigator: Lisa Shappee, Doctoral Candidate,
College of Education, Kansas State University

Invitation to be Part of a Research Study

You are invited to participate in a research study about the impact of the COVID-19 pandemic on faculty teaching methods and technology adoption in higher education. We are inviting you to participate if you are a faculty member who has taught courses before and during the COVID-19 pandemic. Participation in this research is voluntary.

Please take time to read this entire form and ask questions before deciding whether to take part in this research.

What is the study about and why is it being done?

This study is designed to capture faculty insights on the effectiveness of various teaching methodologies and technologies employed in course delivery post-COVID-19. The research aims to examine how the pandemic has reshaped university teaching practices and to uncover strategies that could enhance future course content development and faculty professional development initiatives.

What will happen if you take part in this study?

If you decide to participate in this study, you will be asked to:

1. Participate in a semi-structured interview via video conferencing to discuss your teaching experiences before and during the COVID-19 pandemic. The interview will take approximately 30-45 minutes.
2. Provide copies of syllabi from courses taught before and during the pandemic to examine changes in teaching practices and technology use.

Your participation will involve one session that is scheduled at your convenience.

How could you or others benefit from this study?

The study has the following potential benefits:

- Participants may gain insights into their teaching practices and reflect on the adoption of new technologies.
- The findings may help improve faculty development programs and course delivery methods in higher education.

What risks might you experience from being in this study?

The expected risks from participating in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

How will personal information be protected?

Efforts will be made to keep your personal information confidential. We will not share information that directly identifies you in any reports about this study. Data will be stored securely and only the research team will have access to the information.

- Participant responses will be kept confidential by replacing names with pseudonyms.
- Interviews will be conducted in a location where others will not easily overhear the conversation.
- Data will be stored on a password-locked computer using dual-authentication security. After five years, all electronic records will be deleted.
- Recordings will be stored on a password-locked computer using dual-authentication security for five years. The researcher will have access to these recordings.

How will you be compensated for being part of the study?

Participants will not be compensated for participating in this study.

Is study participation voluntary?

Participation in this study is voluntary. Your decision whether to participate will not affect your current or future relations with Kansas State University. If you decide to participate, you are free to not answer any question or withdraw at any time.

What should you do if you decide to withdraw from the study?

If you choose to withdraw from the study, please contact the researcher at the email address/phone number included in the next paragraph.

Whom do you contact if you have questions or concerns about the study?

The researcher conducting this study is Lisa Shappe. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at (785) 576-2212 or lsappee@ksu.edu.

Appendix F - IRB Approval



Office of Research Integrity,
Compliance and Security

TO: Deepak Subramony
Curriculum and Instruction
Manhattan, KS 66506

Proposal Number: IRB-12790

FROM: Lisa Rubin, Chair
Committee on Research Involving Human Subjects

DATE: 03/24/2025

RE: Proposal Entitled, "Faculty Adaptation to Online and Hybrid Teaching Post-COVID-19: A Case Study of Pedagogical Shifts, Technology Integration, and Professional Development in Higher Education."

The Committee on Research Involving Human Subjects / Institutional Review Board (IRB) for Kansas State University has reviewed the proposal identified above and has determined that it is EXEMPT from further IRB review. This exemption applies only to the proposal - as written - and currently on file with the IRB. Any change potentially affecting human subjects must be approved by the IRB prior to implementation and may disqualify the proposal from exemption.

Based upon information provided to the IRB, this activity is exempt under the criteria set forth in the Federal Policy for the Protection of Human Subjects, **45 CFR §104(d), category: Exempt Category 1.**

Certain research is exempt from the requirements of HHS/OHRP regulations. A determination that research is exempt does not imply that investigators have no ethical responsibilities to subjects in such research; it means only that the regulatory requirements related to IRB review, informed consent, and assurance of compliance do not apply to the research.

Any unanticipated problems involving risk to subjects or to others must be reported immediately to the Chair of the Committee on Research Involving Human Subjects, the University Research Compliance Office, and if the subjects are KSU students, to the Director of the Student Health Center.

Electronically signed by Lisa Rubin on 03/24/2025 5:03 PM ET

TO: Deepak Subramony
Curriculum and Instruction
Manhattan, KS 66506

FROM: Lisa Rubin, Chair
Committee on Research Involving Human Subjects

DATE: 04/18/2025

RE: Proposal #IRB-12790, entitled "Faculty Adaptation to Online and Hybrid Teaching Post-COVID-19: A Case Study of Pedagogical Shifts, Technology Integration, and Professional Development in Higher Education."

MODIFICATION OF IRB PROTOCOL #IRB-12790, ENTITLED, "Faculty Adaptation to Online and Hybrid Teaching Post-COVID-19: A Case Study of Pedagogical Shifts, Technology Integration, and Professional Development in Higher Education"

EXPIRATION DATE: Exempt

The Committee on Research Involving Human Subjects (IRB) has reviewed and approved the request identified above as a modification of a previously approved protocol. **Please note that the original expiration remains the same.**

All approved IRB protocols are subject to continuing review at least annually, which may include the examination of records connected with the project. Announced in-progress reviews may also be performed during the course of this approval period by a member of the University Research Compliance Office staff. Unanticipated adverse events involving risk to subjects or to others must be reported immediately to the Chair of the IRB, and / or the URCO

It is important that your human subjects activity is consistent with submissions to funding / contract entities. It is your responsibility to initiate notification procedures to any funding / contract entity of any changes in your activity that affects the use of human subjects.

Electronically signed by Lisa Rubin on 04/18/2025 12:31 PM ET

Appendix G - Codebook

Dissertation Research

Codes\RQ Codebook

Name	Description	Files	References
Barriers to Effective Online Teaching		15	332
Emotional strain		13	55
External and Societal Pressures		7	25
Health and Safety		11	29
Student disengagement		9	25
Online Learning		8	24
Unclear institutional guidance		10	161
Administrative Challenges		5	40
Institutional Decisions	Decisions made made because of, to prepare for, or make it through instruction during the pandemic	10	120
Unequal technology access		10	36
Technology Purchases		10	35
Workload_time pressure		11	54
Faculty Change Struggle		10	41
Faculty Workload		3	8

Name	Description	Files	References
Family Responsibilities		2	4
Facilitators		14	301
Facilitators of Effective Teaching		14	301
Autonomy and creative freedom		6	7
Prior Online or Hybrid Teaching		8	15
Teaching Motivation or Engagement		3	4
Instructional designer support		14	141
Faculty Support		12	88
Institutional Support		9	52
Peer Support		8	31
Peer Support		8	31
Professional Development		13	77
Professional Development		13	77
Faculty Adaptation to Online & Hybrid Teaching		16	398
Increased flexibility		7	12

Name	Description	Files	References
HybridHyFlex Teaching		6	11
Initial disruption		11	62
Course Changes During Pandemic		8	50
Emergency Remote Teaching		5	11
Intentional redesign		5	21
Course Content Creation		4	20
Steep learning curve		16	292
Online Teaching		15	115
Transition for the Pandemic		16	176
Sustained modular structure		6	10
Quality Online Instruction		5	9
Growth in Technology Use, Confidence, and Self-Efficacy		12	177
Improved ease of use		11	30
New Technologies Utilized		10	29
Increased comfort		3	4
Self-Efficacy		11	38
Perceived usefulness		12	28
Adoption		12	27

Name	Description	Files	References
Sustained technology integration		9	11
Existing Technology Before Pandemic		8	10
Long-Term Pedagogical Shifts		15	478
Empathy-driven teaching		12	20
Lessons Learned		12	19
Flexible policies		14	65
Student Support		13	64
Future institutional expectations		15	91
Back to Pre Pandemic Policies		2	3
Face-to-Face Education		10	25
Transition back to campus		14	62
Normalization of hybrid practices		14	147
Future of HybridOnline Teaching		8	18
Future Teaching Goals		8	15
Post Pandemic Practices		14	113
Revised assessments		15	154

Name	Description	Files	References
Teaching Practices		15	153